

THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF ENVIRONMENTAL SERVICES
WASTE MANAGEMENT COUNCIL

In re: North Country Environmental Services, Inc.
Standard Permit No.: DES-SW-SP-03-002

Docket #03-05WMC

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MAY 07 2003

MOTION TO DISMISS APPEAL

Intervenor, North Country Environmental Services, Inc. ("NCES"), moves the council to dismiss this appeal. This motion rests upon the following grounds.

The Town of Bethlehem has appealed the issuance of a standard permit for Stage IV of a double-lined landfill owned and operated by NCES. The town contends that the waste management division misinterpreted RSA 149-M in issuing the permit. Specifically, the town argues that (1) the division misapplied RSA 149-M:11 in finding that Stage IV provides a "substantial public benefit" and (2) the division committed two procedural errors. The town misconstrues both the "public benefit" statute and the statutory procedure governing the division's consideration of a permit application. Accordingly, the appeal should be dismissed.

Discussion

A. Dismissal is Proper Where the Relief Sought by the Notice of Appeal is Based Upon a Misinterpretation of the Law.

A motion to dismiss is a time-saving measure. It enables the adjudicator – in this case the council – to determine whether a party's pleading – in this case the town's notice of appeal and supporting memorandum – seeks relief that is consistent with the law. Hawkins v. N.H. Dept. of Health

and Human Services, 147 N.H. 376, 378 (2001). If the claims are based on a faulty understanding of the law, the council can dismiss the claims without having to hold a full-blown hearing.

When a party files a motion to dismiss, the council “ ‘must rigorously scrutinize the [notice of appeal] to determine whether, *on its face*, it asserts’ ” a valid claim for relief under the law. Emphasis in original. Kennedy v. Titcomb, 131 N.H. 399, 401 (1989) *citing* Jay Edwards, Inc. v. Baker, 130 N.H. 41, 44-45 (1987) (describing supreme court’s review of dismissal by superior courts). If the facts as alleged by the town do not “establish a basis for legal relief,” dismissal is proper, and the supreme court will not disturb the council’s findings on appeal. Scheffel v. Krueger, 146 N.H. 669, 671 (2001) (in context of supreme court review of superior court dismissal).

As the following discussions establish, the town’s claims for relief are based upon factual assumptions disproved by the exhibits attached to its notice of appeal and misinterpretations of the law. As a consequence, the claims should be dismissed.

B. The Division Properly Applied the Public Benefit Statute.

Most of the town’s notice of appeal and supporting memorandum of law is devoted to its assertion that the division failed to properly apply RSA 149-M:11. According to the town, the division made four errors in applying the statute. Each of these allegations, however, reflects the town’s misunderstanding of the statutory language and the facts.

1. *The Division Considered the Concerns of the Town in Determining that Stage IV will Provide a Substantial Public Benefit.*

The public benefit statute, RSA 149-M:11, is composed of twelve sections, the purpose of which is “to ensure benefit to the citizens of New Hampshire by providing for solid waste management

options which will meet the capacity needs of the state while minimizing adverse environmental, public health and long-term economic impacts.” RSA 149-M:11, II. The division is to “determine whether a proposed solid waste facility provides a substantial public benefit based on” three criteria: the need for such a facility to accommodate the state’s long-term and short-term waste generation, the facility’s ability to assist the state in achieving certain waste management goals within a statutory hierarchy, and the role the facility plays in furthering the state’s waste management plan and the plan of one or more municipalities. RSA 149-M:11, III (a)-(c).

In making its determination in accordance with these three criteria, the division is to “*consider* as part of its public benefit determination . . . [t]he concerns of the citizens and governing bodies of the host municipality, county and district and other affected persons.” Emphasis supplied. RSA 149-M:11, IV (a). The concerns the division must consider are those expressed at the public hearing on the permit application. *See* RSA 149-M:12, III (division has up to 30 days after public hearing to decide on application “in order to assure proper consideration of public concerns.”). The town argues that the division did not consider the concerns of the town and its citizens and that if the host municipality opposes the siting of a new facility, the facility cannot meet the public benefit requirement. Town Memo at 2. Neither argument withstands scrutiny.

According to the town, “[t]here is not one shred of evidence that even suggests the NHDES-WMD considered the concerns of the citizens and governing bodies [sic] of the host municipality.” *Id.* This statement is mystifying given that Exhibit M to the town’s notice of appeal is the division’s eleven-page response to the oral and written concerns expressed by the town and its citizens. The division sent this response to the town’s counsel on the same day as it granted the Stage IV permit. In the first

paragraph of the letter, moreover, the division stated explicitly that “these comments [from the town] were taken into consideration as part of the technical review of the [Stage IV] application.” Town Exhibit M at 1.

As a factual matter, then, the division did consider the town’s concerns. The town contends, however, that the division “could not have determined that Stage IV met the public benefit requirement” because the town was “strongly opposed to further expansion of the landfill” and town ordinances purport to “prohibit the expansion” of landfills. Town Memo at 2-3. The statute, though, requires that the division *consider* the town’s concerns; it does not require that the division *satisfy* those concerns. Nothing in the statute renders municipal concerns dispositive of the application, and the town’s suggestion to the contrary is insupportable under the law. Ground A of the town’s notice of appeal (Notice of Appeal at 2) must therefore be dismissed.

2. *The Division Used the Statutory Methodology to Determine Whether There is a Shortfall in the State’s Disposal Capacity.*

The Town claims that the division failed to properly determine whether the State has a capacity shortfall, one of the criteria governing the division’s public benefit determination. As the basis of this argument, the town quotes a fragment of RSA 149-M:11, III (a), which requires the division to assess “[t]he short- and long-term need for a solid waste facility of the proposed type, size, and location” to accommodate the State’s solid waste. What the town neglects to disclose is that the “capacity need shall be identified as provided in paragraph V” of the statute. RSA 149-M:11, III (a). Indeed, the town does not so much as acknowledge that paragraph V of the statute creates the methodology by which the division must calculate the State’s capacity need.

The propriety of the division's assessment of capacity need, then, must be measured against the methodology set out in RSA 149-M:11, V, not a creative interpretation of a portion of RSA 149-M:11, III (a). The town's failure to demonstrate that the division departed from the statutory methodology is fatal to this ground of its appeal.

Once again, moreover, an exhibit to the town's notice of appeal provides its undoing. Exhibit N is the division's detailed March 7, 2003, Capacity Needs Analysis, calculated precisely in accordance with the RSA 149-M:11, V methodology. Thus, not only has the town failed to allege or show that the division miscalculated capacity need, but its submission demonstrates that the division made the calculation properly. As a result, Ground B. I. of its appeal must be dismissed.

3. *The Division Properly Considered Only Permitted Disposal Capacity in its Capacity Needs Analysis.*

The town claims that the division misapplied RSA 149-M:11, V (c) by considering only those currently operating facilities with valid standard permits in performing its capacity needs analysis. Town Memo at 6. The town overlooks, however, that the statutory methodology explicitly requires the division to "[i]dentify, according to type of solid waste received, all *permitted* facilities operating in the state on the date a determination is made under this section." Emphasis supplied. RSA 149-M:11, V (c). It is the capacity of these permitted facilities that the division is to employ in its capacity need evaluation. RSA 149-M:11, V (d). The division's analysis, then, complied with the statutory requirement.

The town also complains that the division's Capacity Needs Analysis "factored in two proposed facilities (NCES's Stage IV and Mt. Carberry's [sic])," implying that the division improperly

took into account unpermitted facilities in performing its analysis. Town Memo at 6. The solution the town offers for this alleged impropriety is to include yet a third unpermitted facility in the needs analysis. Id.

The division's Response to Public Comment (Town Exhibit M), however, makes it clear that in determining whether Stage IV satisfies the public-benefit requirements, it did not consider the proposed but unpermitted capacity at the NCES and Mt. Carberry facilities. In the Response, the division notes that its analysis reveals "that a capacity shortfall will exist in the year 2013." Id. at 9, ¶19. The Capacity Needs Analysis (Town Exhibit N) assesses capacity needs in accordance with RSA 149-M:11, V, in Table 2. Id. at 5. That table is entitled "Potential Shortfall Reflecting Actual Existing Conditions (Permitted Capacity)" and shows a shortfall beginning in 2013. Footnotes 6 and 7 to the table state that "requested expansion potential" of those sites *was not* included in the analysis. Id.

For informational and comparative purposes, the Capacity Needs Analysis includes three additional tables. These tables show the effect of the "requested expansion potential" at the NCES and Mt. Carberry facilities upon the shortfall projected in Table 2. Id. at Tables 3-5. The town cites no evidence that these three tables played any part in the division's determination that Stage IV will provide a substantial public benefit. Hence, Ground B. II. of the town's notice of appeal should be dismissed.

4. *The Division Required NCES to Operate Stage IV
Consistent with the Goals and Hierarchy of RSA
149-M:2 and 3.*

While the general court established a goal "by the year 2000" of "40 percent minimum weight diversion of solid waste landfilled or incinerated" (RSA 149-M:2, I), the state has fallen well short of

this goal. The town argues that because the state “is currently achieving only a 23% weight diversion rate,” no further landfill capacity should be approved “[i]n order to make up for lost ground.” Town Memo at 7.

RSA 149-M:11, III (b) requires the division to evaluate “the ability of [a] proposed facility to assist the state in achieving the hierarchy and goals under RSA 149-M:2 and RSA 149-M:3” as a part of its public benefit determination. The statute does not require the division to deny a standard permit to landfill facilities until the 40% diversion goal is met.

The division granted NCES a standard permit for Stage IV on the express condition that NCES “operate this facility in a manner that will assist in achieving the implementation of the hierarchy and goals under RSA 149-M:11, III (b) and shall avoid to the extent possible the disposal of recyclable material in the landfill.” Standard Permit at 4, ¶ 7 (f) (2) (Town Exhibit A). In addition, NCES submitted a detailed analysis of the public benefit provided by Stage IV as a part of its permit application (NCES Exhibit 1). In that analysis, NCES demonstrated how its landfill facility assists the state in implementing its goals and hierarchy. Id. at 8-23. There was therefore a clear factual predicate for the division’s determination.

The division properly applied RSA 149-M:11, III (b) in determining that Stage IV will provide a substantial public benefit. The town, however, seeks a remedy not provided for under the statute. As a result, Ground B. III. of the town’s notice of appeal must be dismissed.

C. The Division Did Not Commit the Procedural Errors
Alleged by the Town.

The town asserts that the division improperly considered NCES's application for the Stage IV standard permit because of an alleged deficiency in the application and that the division should have held more than one public hearing on the application. Both assertions are baseless.

1. *The Division is Entitled to Accept the Applicant's
Representations as to the Necessity of Local
Approvals.*

Section III of the division's standard permit application form inquires whether zoning approval is necessary for the proposed facility. In response to that inquiry, NCES indicated that zoning approval is unnecessary to the development of Stage IV. NCES Exhibit 2.

The town argues that the division should not have accepted this statement by NCES. Town Memo at 7. Instead, it contends, the division should have found NCES's application incomplete. *Id.* at 7. This argument misapprehends the division's role under RSA 149-M.

In its Response to Public Comments (Town Exhibit M), the division explains that a 1996 change in the law relieved it of any responsibility to determine whether local approvals were necessary for a proposed facility.

In enacting this version of the statute, the legislature eliminated a provision that the permittee submit evidence of local approval to the Department. This provision was eliminated because it potentially placed the Department in the position of determining the validity of the representations being made. The Department is not the appropriate body to make a legal determination whether or not local zoning ordinances apply to a facility or if a local approval is valid. The statute, as it currently stands, does not eliminate a permittee's obligation to obtain lawful local approval.

Response at 2 (commenting on enactment of RSA 149-M:9, VII).

Whether Stage IV requires zoning approval is a matter in litigation between NCES and the town.¹ The division is not responsible for interpretation and enforcement of the town's ordinances. *See* RSA 149-M:12 (criteria for approval of permit application *do not* include determination of compliance with local law). That responsibility lies with the town and the courts. Thus, the division was entitled to accept NCES's representation that it did not require zoning approval. If the town's zoning restrictions are "lawful" and "not inconsistent with [RSA 149-M]," the issuance of the Stage IV permit will not affect NCES's obligation to comply with them. RSA 149-M:9, VII. If those restrictions are unlawful or inconsistent with the statute, however, NCES need not comply with them. *Id.* It is not the division's role to adjudicate this issue.

Accordingly Ground C of the town's notice of appeal must be dismissed.

2. *The Division Complied With the Requirement for a Public Hearing on the Stage IV Application.*

By statute and rule, the division must hold a public hearing before granting a standard permit. RSA 149-M:9, VII requires "an opportunity for hearing to interested persons." Under RSA 149-M:12, III, the division need not "issue a final decision on any application until 30 days after a public hearing held pursuant to RSA 149-M:11, IV (a)," which requires "at least one public hearing in the host municipality." RSA 149-M:11, IV (a); *see also* Env-Wm 304.08 (contemplating *one* public hearing).

The town acknowledges that the division held a public hearing on October 8, 2002, on NCES's Stage IV application. Town Memo at 8. It claims, however, that "it did not have a complete version of the application" and was entitled to a second public hearing after it received a completed

¹ After the division issued the Stage IV permit, the Grafton Superior Court ruled that the town's ordinance prohibiting NCES from expanding into Stage IV is enforceable. NCES will be appealing the superior court's decision.

application. Id. The town does not specify how the application was incomplete, nor does it identify any prejudice it suffered as a result of DES's denial of a second public hearing.

The town has therefore alleged an insufficient factual basis for its claim, failed to allege that it was harmed by the division's decision, and failed to cite any authority requiring the division to hold a second public hearing. Hence, Ground D of the notice of appeal (Notice of App. at 3) should be dismissed.

Conclusion

In accordance with the foregoing, NCES respectfully requests that the council dismiss the town's appeal.

Respectfully Submitted,

NORTH COUNTRY ENVIRONMENTAL
SERVICES, INC.,

By Its Attorneys,

BROWN, OLSON & WILSON, P.C.

Date: 5-7-03

By:



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CERTIFICATE OF SERVICE

I hereby certify that the within document was this day forwarded via U.S. Mail, postage prepaid, to Edmund J. Boutin, Esq. and Brenda E. Keith, Esq., Boutin Associates, P.L.L.C., One Buttrick Road, P.O. Box 1107, Londonderry, NH 03053 and to Maureen D. Smith, Senior Assistant Attorney General, Environmental Protection Bureau, Department of Justice, 33 Capitol Street, Concord, NH 03301-6397.

Date: 5-7-03

COPY

Bryan K. Gould, Esq.

NCES EXHIBIT 1

PUBLIC BENEFIT STATEMENT
Proposed Stage IV
North Country Environmental Services, Inc.
Bethlehem, New Hampshire

1.0 INTRODUCTION

This document has been prepared as a supplement to the application of North Country Environmental Services, Inc. (NCES) for approval of the proposed Stage IV of the NCES facility in Bethlehem. This document is prepared pursuant to RSA 149-M:11, III (a) through (c) to demonstrate the substantial public benefit provided by the proposed Stage IV. Provided below are the relevant statutory criteria to be considered in making the determination of public benefit followed by a demonstration that Stage IV meets those criteria.

2.0 STATUTORY REQUIREMENTS

RSA 149-M:11, III (a)-(c) prescribes the criteria by which public benefit is to be assessed. These criteria are:

- (a) The short- and long-term need for a solid waste facility of the proposed type, size, and location to provide capacity to accommodate solid waste generated within the borders of New Hampshire, which capacity need shall be identified as provided in paragraph V.
- (b) The ability of the proposed facility to assist the state in achieving the implementation of the hierarchy and goals under RSA 149-M:2 and RSA 149-M:3.
- (c) The ability of the proposed facility to assist in achieving the goals of the state solid waste management plan, and one or more solid waste management plans submitted to and approved by the department under RSA 149-M:24 and RSA 149-M:25.

3.0 CAPACITY NEED

3.1 Role of Capacity in Determining Public Benefit

The assessment of the capacity needed to accommodate waste generated in New Hampshire is one of many factors to be considered in determining public benefit. It is not determinative, however, of either public benefit or the permitted capacity of a proposed facility.

In enacting the public benefit requirement, the general court declared as its purpose ensuring “that adequate capacity exists within the state to accommodate the solid waste generated within the state.” RSA 149-M:11, I (b). Ensuring adequate capacity is quite different, however, from restricting capacity to accommodate only in-state waste. Nothing in RSA ch. 149-M directs the department to use the public benefit requirement to permit waste disposal facilities only to the extent necessary to meet New Hampshire’s capacity needs.

As a result, if a proposed facility assists the state in providing adequate capacity for New Hampshire waste and otherwise meets the public benefit criteria, the facility’s public benefit is demonstrated. The statute therefore passes constitutional muster in that it does not discriminate against out-of-state waste. A public benefit scheme that restricted permitted capacity to in-state requirements would violate the commerce clause of the United States Constitution. As the United States Supreme Court has held:

Even assuming that landfill space is a “natural resource,” “a State may not accord its own inhabitants a preferred right of access over consumers in other States to natural resources within its borders.” . . . However serious the shortage of landfill space may be, . . . “[n]o State may attempt to isolate itself from a problem common to the several States by raising barriers to the free flow of interstate trade.”

Oregon Waste Systems, Inc. v. Department of Environmental Quality of the State of Oregon, 511 U.S. 93, 107 (1994) quoting City of Philadelphia v. New Jersey, 437 U.S. 617, 627 (1978) and Chemical Waste Mgmt., Inc. v. Hunt, 504 U.S. 334, 339-40, 346 n.9 (1992). See also Fort Gratiot Landfill v. Michigan Dept. of Natural Resources, 504 U.S. 353, 367 (1992) (“no valid health and safety reason for limiting the amount of waste that a landfill operator may accept from outside the State but not the amount that the operator may accept from inside the State.”); C & A Carbone, Inc. v. Town of Clarkston, 511 U.S. 383, 394 (1994).

3.1.1 Waste Generation and Diversion

RSA 149-M:11, III (a) specifies the methodology the department must employ to determine the “capacity [needed] to accommodate solid waste generated within the borders of New Hampshire.” That determination is to be made pursuant to the provisions of RSA 149-M:11, V which require the department to:

- (a) Project, as necessary, the amount of solid waste which will be generated within the borders of New Hampshire for a 20-year planning period. In making these projections the department shall assume that all unlined landfill capacity within the state is no longer available to receive solid waste.

- (b) Identify the types of solid waste which can be managed according to each of the methods listed under RSA 149-M:3 and determine which such types will be received by the proposed facility.
- (c) Identify, according to type of solid waste received, all permitted facilities operating in the state on the date a determination is made under this section.
- (d) Identify any shortfall in the capacity of existing facilities to accommodate the type of solid waste to be received at the proposed facility for 20 years from the date a determination is made under this section. If such a shortfall is identified, a capacity need for the proposed type of facility shall be deemed to exist to the extent that the proposed facility satisfies that need.

The waste disposal needs for New Hampshire for a 20-year period may be derived from waste generation data provided by the NHDES Planning and Community Assistance Section (PCAS) and population data from the New Hampshire Office of State Planning (OSP). PCAS data indicate that 1,382,600 tons of MSW were generated in 2000 and that the average per capita generation rate for municipal solid waste (MSW) from residential and commercial sources is 6.4 pounds per day or about 1.168 tons per year (TPY). NCES has selected a 20-year planning period commencing in 2005 and continuing through 2024. NCES selected this period because it does not expect to commence operating Stage IV until all the capacity of Stage III is utilized. Population figures for this period were derived from "Municipal Population Projection 2000 to 2020" prepared by OSP. Population figures were updated using year 2000 census data and a formula provided by OSP. Applying a per capita waste generation rate of 1.168 TPY for municipal solid waste including residential and commercial waste to projected population data for New Hampshire through 2024 results in total estimated quantity of MSW of 34,000,000 tons for the 20-year planning period. This figure does not include construction and demolition debris (C&D) or special wastes.

Yearly C&D production has increased at a nominal rate of 59% over the period between 1994 and 2000. PCAS attributes this rise to the success of in-state processing facilities, increased construction brought about by historically good economic times, and continually improving data collection on the part of the state and solid waste facilities. A certain amount of this increase would of course be attributable to a general rise in population between 1994 and 2000. PCAS data indicate that the average per capita generation rate for C&D in-state is about 0.189 TPY. In the year 2000, a population of 1,235,786 produced 233,641 tons of C&D. Applying a per capita C&D generation rate of 0.189 TPY to projected population data for New Hampshire from 2005 through 2024 results in a total estimated quantity of C&D of 5,500,000 tons for the 20-year planning period.

Disposal capacity is also required for non-hazardous special wastes such as wastes from

industrial processes, waste from spill clean-ups, some ash from MSW combustion, wood ash, non-infectious medical waste, asbestos, and soils. Certain waste materials used as daily cover must also be taken into account in this category. PCAS data for 2000 reveal that 308,712 tons of asbestos, ash, soils, and materials used as alternate daily cover were disposed of in the NCES, Nashua, Franklin, and TLR-III facilities. This tonnage figure reflects only those facilities that specifically listed these items in their annual solid waste facility reports and may include some imported tonnages. No figures are available to determine the tonnage of New Hampshire-generated non-infectious medical waste. Other New Hampshire solid waste facilities may accept these materials, although the waste may not be itemized on the facility report.

Data indicate 67,000 tons of ash was disposed at the ash monofill so that the quantity of special waste net the ash disposed at the landfill is about 242,000 tons or about 15 percent of the total of MSW and C&D. However, for purposes of this statement, NCES estimates that the production of special wastes is equal to 12% of the total MSW and C&D generated in-state. This is because in the year 2000, approximately 80 percent of the solid waste disposed of in New Hampshire was generated in New Hampshire. Applying a 12% multiplier to the total MSW and C&D projected to be generated in-state during the 20-year study period yields an estimated production of 4,700,000 tons of special waste over that same period.

The total projected waste generation in New Hampshire in the 20-year planning period is therefore 44,200,000 tons. The general court set a goal of diverting 40% (by weight) of the state's waste through reduction, reuse, recycling, and composting by the year 2000. RSA 149-M:2, I. Applying the diversion goal to the projected quantity of MSW and C&D to be generated and adding the estimated tonnage of special waste would result in a projected quantity of waste requiring disposal from 2005 to 2024 of 28,400,000 tons.

According to PCAS, however, as of 2000, the state had achieved only 23% diversion. The general court has so far declined, moreover, to prohibit the disposal of recyclables in incinerators and landfills as a means of reaching the 40% goal. As a consequence, assuming a 40% diversion rate would substantially understate the state's capacity needs. It is more conservative (and therefore consistent with ensuring adequate capacity) to assume a 26% diversion rate in 2005 escalating to 33% in 2010 and to 40% in 2015. Taking this diversion rate into account, the projected quantity of waste requiring disposal from 2005 to 2024 is 30,300,000 tons.

3.1.2 Permitted Disposal Capacity

RSA 149-M:11, V (c) requires the department to identify "all permitted facilities operating in the state" as of the time of the public benefit determination. RSA 149-M:11, V (d) provides that the permitted disposal capacity for each facility must be identified for a 20-year period to determine whether a capacity shortfall exists. Permitted waste disposal facilities in New Hampshire include five lined landfills and two waste-to-energy plants. In addition, there are three C&D processing facilities in

southern and central New Hampshire, LL&S in Salem, ERRCO in Epping, and the Turnkey Facility in Rochester. The capacity provided by unlined landfills and incinerators without waste-to-energy was not included in the evaluation of permitted disposal capacity in New Hampshire. The tonnages of New Hampshire C&D waste processed at the C&D processing facilities was assumed to remain constant at 2000 levels through the 20-year planning period. See Table 2.

As a preliminary matter, the department must determine what the general court meant by “permitted facilities” in RSA 149-M:11, V (c). While the statute does not define “permitted facilities,” the Rules of the Waste Management Division define “permitted facility” as “a facility with a valid permit issued pursuant to RSA 149-M and the solid waste rules.” Env-Wm 102.121. A “permit” is “an authorization from the department for the *construction and operation* of a facility.” Emphasis supplied. Env-Wm 102.117; RSA 149-M:4, XIV. Thus, even if a landfill facility has a standard permit for a specific design footprint, only those cells for which an applicant has received construction *and* operating approvals from the department may be considered “permitted facilities” for purposes of determining public benefit. This is confirmed by the language of RSA 149-M:11, V (c) which requires the department to assess the amount of disposal capacity in the state by identifying “all permitted facilities *operating* in the state” (emphasis supplied) in connection with its public-benefit analysis. Only a landfill cell with construction and operating approvals may “operate” in the State of New Hampshire. See Env-Wm 2805.03. DES, however, projects capacity solely on the basis of the design approved by standard permits. It is important to recognize that because the department includes capacity that has only received design approval, it overstates capacity for purposes of applying the public-benefit criteria.

NHDES estimates of the state’s current remaining landfill capacity are: TLR-III (9 years or through 2010), Nashua (20 years or through 2021), Lebanon (25 years or through 2026), Mt. Carberry (20 years or through 2021), and Conway (22 years or through 2023). The twenty-year planning period, however, begins in 2005 when Stage IV is expected to begin operation and to end in 2024. For the purposes of the planning period, the capacity for TLR-III is 6 years, for Nashua 17 years, for Lebanon 20 years, for Mt. Carberry 17 years, and for Conway 19 years. The fill rates projected by NHDES for each landfill are: 80,000 TPY (Nashua), 48,000 TPY (Lebanon), 32,500 TPY (Mt. Carberry), and 10,000 TPY (Conway). Mt. Carberry has traditionally held its fill rate at 14,500 TPY, however. The fill rates for TLR-III are specified by permit as 850,000, 800,000, 800,000, 750,000, 750,000, and 740,000. The total estimated landfill capacity for the 20-year planning period is the sum of the products of the remaining capacity of each facility multiplied by its annual fill rate. This calculation yields a total landfill capacity for the 20-year planning period of approximately 7,456,500 to 7,762,500 tons, depending upon whether Mt. Carberry accepts waste at its permitted rate.

The permitted nominal disposal capacities of the Claremont and Concord waste-to-energy facilities are 200 and 500 tons per day (TPD) (73,000 and 182,500 TPY), respectively. While the total nominal capacity of the Claremont facility is 73,000 TPY, 30,000 TPY are dedicated to disposal of Vermont waste. Incineration, moreover, does not “dispose” of waste; rather, it reduces its weight by

two-thirds. According to PCAS, the Franklin ash landfill which receives ash from the Concord facility has 8 years of capacity remaining. Therefore, NCES has assumed that the disposal capacity of the Concord facility is the nominal rate of 182,500 TPY through 2009 and two-thirds of that rate thereafter to account for the ash.

The Claremont facility can no longer dispose of its ash at the New Hampshire/Vermont Solid Waste Project's ash landfill in Newport, New Hampshire. Combustion of the 73,000 tons of waste each year in Claremont produces about 24,300 tons of ash. Assuming the facility receives 43,000 tons of New Hampshire waste for disposal, the net quantity of waste disposed is estimated to be about 18,700 TPY.

The Claremont facility, moreover, is under contract only through 2007 to accept waste. Its contract with Connecticut Valley Electric Company for the sale of its power also expires in 2007. At the prevailing market price of power, Wheelabrator would suffer a reduction of well over 50% in the price it receives for power in July of 2007. Likewise, the Concord facility's contracted capacity (assuming exercise of a 10-year option) and electricity sales contract expire in 2019. This would likely affect the economics of the facility and could affect the availability of this resource. Table 2 therefore depicts available capacity both with and without the Claremont and Concord facilities operating after their existing contracts expire.

3.1.3 Range of Capacity Shortfall

The waste disposal capacity through the planning period is the sum of projected landfill capacity (7,456,500 to 7,762,500 tons) and the capacity of the waste-to-energy and C&D processing facilities (see Table 2). Accordingly, the total statewide permitted waste disposal capacity for the planning period is estimated to be 11,800,000 to 14,700,000 tons depending on whether the Claremont facility closes in July of 2007, the Concord facility closes in 2019, or Mt. Carberry accepts waste at its permitted rate. Deducting this range of capacity from the state's projected waste generation (Table 1) produces an estimated 20-year shortfall of 13,700,000 to 16,600,000 tons at a 40% diversion rate and 15,600,000 to 18,500,000 tons at a 26% rate until 2005, a 33% rate from 2006 to 2010, and a 40% rate thereafter.

Not all permitted capacity will be used for disposal of New Hampshire-generated waste. 2000 data from PCAS indicate 250,000 tons of waste were imported, while 57,000 tons were exported. The majority of this waste was imported to the commercial disposal facilities. According to the Governor's Solid Waste Task Force Report, approximately 20% of the waste disposed of in New Hampshire in 2000 was from out-of-state sources. Given the economic realities of regional waste disposal facility operation, some of the permitted capacity will continue to be used for disposal of out-of-state waste. As noted above, moreover, the dormant commerce clause prevents the state from restricting the importation and disposal of out-of-state waste. It is therefore reasonable to assume that existing capacity in the state will be used to some degree for the disposal of out-of-state waste. The

actual 20-year capacity shortfall will therefore be higher than the figures given above.

Even though the department takes into account disposal capacity which is the subject of a standard permit but not an operating permit and therefore overestimates disposal capacity as defined by statute, there remains a substantial capacity shortfall for the 20-year planning period.

3.2 Location of the Facility

RSA 194-M:11, III (a) requires that the location of the proposed facility be considered in the evaluation of public benefit. With increased distance to the disposal facility, there is an increased cost for transportation and potential environmental impacts resulting from increased traffic and fuel consumption/emissions. In addition to increased transportation costs, there would likely be costs associated with design, permitting and operation of a regional transfer station to consolidate waste into larger vehicles if transporting waste to facilities out of the region is required.

Given that the majority of the constructed and operating disposal capacity is located in the southern portion of New Hampshire, those communities and businesses in the northern portion of New Hampshire would pay disproportionately more for waste disposal at the waste disposal facilities located in the southern portion of the State when factoring in transportation and handling costs. The commercial waste disposal facilities, with the exception of the Mt. Carberry Landfill, are located in the southern or central portion of New Hampshire. NHDES representatives indicate that Mt. Carberry may accept 32,500 TPY of MSW. Historically, however, it has accepted only about 14,500 TPY, and the landfill's future is uncertain. The Mt. Carberry facility accepts very little C&D and the types of C&D materials accepted by the waste-to-energy facilities are also limited.

Neither the Conway facility nor the Lebanon facility provides capacity to the North Country within the meaning of the public benefit statute. The Conway facility receives waste only from Conway and two adjoining towns. The Lebanon facility met the public benefit requirement under RSA 149-M:11, VII. Under this provision, a municipally-owned solid waste facility is "deemed" to provide a public benefit only if it is built within a solid waste district to serve the needs of that district. Any permit issued under RSA 149-M:11, VII must state that it "is limited to receiving solid waste generated within that district." By law, then, the Lebanon facility may only be considered to provide capacity for the Upper Valley Waste District, for which it was permitted.

The NCES facility is located in northern New Hampshire and therefore provides a cost-effective regional waste disposal opportunity for North Country communities. Tables 3 through 7 project waste generation in the North Country during the 20-year planning period. North Country municipalities within the Upper Valley Waste District and currently being served by the Lebanon landfill are excluded, as are the municipalities served by the Conway, Claremont, and Concord facilities except for C&D projections for communities now served by the Wheelabrator facilities.

Projected waste generation in the region was evaluated using population data for the various towns provided by OSP and per capita MSW and C&D waste generation rates provided by PCAS. With the foregoing assumptions, the projected total of MSW and C&D waste generation for the region is 193,183 tons for 2005 as indicated in Table 3. Applying a 40% diversion rate, the projected total of MSW and C&D requiring disposal in 2005 is 115,910 tons. Applying the more realistic diversion rate of 26%, the total is 129,433 tons. Assuming an additional 12% for disposal of special wastes results in a total quantity of waste requiring disposal of 139,092 to 152,615 tons, assuming 40 and 26% diversion respectively. Subtracting the 32,500 TPY of waste which may directed to Mt. Carberry, results in a total capacity need in the region of 106,592 to 120,115 tons depending upon the waste diversion rate. If Mt. Carberry's historic waste acceptance rate of 14,500 TPY is taken into account, projected regional disposal needs range from 124,592 to 138,115 tons in 2005. These numbers escalate modestly through the planning period. In developing Table 4 the diversion rate was assumed to have escalated to 33% and was assumed to be 40% from 2015 through 2024.

Because not all waste in the North Country region is taken to the NCES facility, NCES has developed a broader service area in the state. This service area extends outside of the North Country but enables NCES to offer regional disposal capacity it would otherwise be unable to offer. Tables 8-13 enumerate the New Hampshire communities within the service area of the NCES facility and project their waste generation in 2005 and 2024. These communities are served by transfer stations owned and operated by NCES affiliates (Tables 8-11) or by municipal tractor trailer transfer stations (Tables 12-13). In total, it is projected that these communities will generate some 586,938 tons of MSW and C&D waste in 2005 (at a 26% diversion rate) and approximately 516,299 tons of New Hampshire waste by 2024 (at a 40% diversion rate). By supplementing the waste from the North Country region not disposed of at Mt. Carberry with some of the waste from NCES's New Hampshire service area, NCES expects to be able to continue to devote a very substantial percentage of the capacity of Stage IV to New Hampshire waste, absent unanticipated changes in the market.

NCES projects that its Bethlehem site will not accommodate any waste beyond the life of Stage IV. The estimated 1,278,000 tons of capacity of Stage IV would provide approximately 9-11 years of capacity for the North Country and other New Hampshire communities at a fill rate, for example, of 115,000 to 140,000 TPY. Stage IV will provide continuity of access to capacity in the North Country, furnishing regional and statewide benefits well after the closure of TLR-III.

4.0 IMPLEMENTATION OF STATE HIERARCHY AND GOALS

This portion of the public benefit statement provides demonstration that the Stage IV expansion to the NCES facility will assist the State in achieving the implementation of the hierarchy and goals under RSA 149-M:2 and M:3, including not disposing of recyclable materials in a lined landfill and establishing an integrated system of waste management facilities.

4.1 Pertinent New Hampshire Statutes

RSA 149-M:2 provides:

The general court declares that the goal of the state, for the period 1990-2000, is to achieve a 40% minimum weight reduction in the solid waste stream on a per capita basis. Weight reduction shall be measured with respect to changes in the total waste stream generated. The goal of weight reduction may be achieved through source reduction, recycling, reuse, and composting, or any combination of such methods, and with the goal of not disposing of recyclable materials in a lined landfill with a leachate collection system. Ash resulting from waste-to-energy technologies or other incineration shall not be subject to further weight reduction. Recycling, reuse, and composting efforts existing as of 1990 shall be considered as counting towards the 40% weight reduction goal.

In exercising any and all powers conferred upon the department under this chapter, the department shall use and consider criteria relevant to the waste reduction goal and disposal hierarchy established in RSA 149-M:2 and 149-M:3. The department shall not take any action relative to the 40% weight reduction goal which causes the municipalities organized under RSA 53-A and 1986, 139 or RSA 53-B to violate or incur penalties under legal obligations existing on June 26, 1990.

RSA 149-M:3 provides:

The general court supports integrated solid waste disposal solutions which are environmentally safe and economically sound. The general court endorses, on order of preference, the following waste management methods:

- Source reduction.
- Recycling and reuse.
- Composting.
- Waste-to-energy technologies (including incineration).
- Incineration without resource recovery.
- Landfilling.

This statutory hierarchy creates a "cascade" with waste or volume removed from the waste stream before final disposal. Properly viewed, landfilling is an essential final element of the hierarchy, not a disfavored alternative. The 40% diversion goal, when realized, will translate into a need to dispose of 60% of the waste stream. Incineration does not dispose of waste but converts it to ash which must be landfilled. The NCES facility, then, plays an indispensable role in the state's waste management scheme, not an intrinsically undesirable means of disposal.

4.2 NCES as Part of an Existing Integrated System of Waste Management

The NCES facility is one component of an existing integrated system of waste management options, many of which contribute to the waste diversion goal in RSA 149-M. These options include source reduction, recycling, composting, waste-to-energy technologies, incineration without resource recovery and landfilling.

Facilities at NCES include a double-lined solid waste landfill which provides waste disposal services for communities and businesses in northern New Hampshire and a transfer station for the residents of Bethlehem. Landfills are a necessary component of an integrated system of waste management to dispose of wastes which are not or cannot be managed in other ways. The NCES facility accepts municipal solid waste generated by residential and commercial sources, construction and demolition debris, and special non-hazardous wastes such as wastes from industrial processes, waste from spill clean-ups, ash from MSW combustion or wood ash, etc. The facility does not accept hazardous wastes, asbestos, liquid wastes, white goods, tires or leaf and yard waste.

Waste diversion and recycling activities are key components in attaining the waste diversion goals established in the statute. Waste reduction and recycling is least expensive and most effective where the waste is generated. NCES is a disposal facility. Most of the waste delivered to the facility is brought by municipalities or private haulers. The majority of the municipalities have some form of recycling underway. Recycling is best promoted by public policy which provides incentives for recycling so that it becomes cost-effective to recycle. Segregating materials at the source and directly hauling them to regional recycling/reuse operations is typically most efficient. NCES's parent, Casella Waste Systems, Inc. ("CWS"), however, conducts recyclables reclamation at its GDS Transfer Facility in Newport, New Hampshire. In-state MSW and C&D that passes through this facility is tipped and separated prior to disposal at NCES. CWS also maintains a recyclable drop-off program for residents at the GDS facility.

From the time the generator of solid waste (i.e., homeowner, business owner, community, etc.) disposes of solid waste to the time it is accepted for disposal at the NCES landfill, several mechanisms within the solid waste management system divert and recycle material from the solid waste stream. NCES provides a necessary disposal location for non-recyclable waste generated in communities and businesses served by the facility.

Many communities throughout New Hampshire, which currently dispose of solid waste at NCES or may dispose of waste at the facility in the future, have established comprehensive and efficient waste diversion and recycling programs. Examples of these programs are as follows:

4.2.1 Pay-As-You-Throw Trash Disposal

Pay-As-You-Throw (PAYT) programs (also known as unit-based pricing, variable-rate pricing, or pay-per-bag) provide a direct economic incentive for residents to reduce the amount of waste they generate because households are only charged for the amount of waste they throw away.

As a result, residents are motivated to not only increase the amount they recycle but also think about ways to generate less waste in the first place.

One of the most important advantages for residents of communities with PAYT programs may be the fairness and greater control over costs that such programs offer. Under PAYT, individuals pay only for what they throw away and, consequently, are directly rewarded for recycling.

Nationwide, municipalities that have adopted PAYT programs have reported a 10% or more reduction in solid waste generation. This reduction in waste generation leads to less frequent pick-ups of municipal solid waste and, in most cases, increased participation rates in recycling programs. Listed below are some of the New Hampshire municipalities with PAYT programs located within the service area of the NCES Landfill.

Municipality	Waste Collection	Program Type
Bethlehem	Drop Off	Bags
Franconia	Drop Off	Bags
Lisbon	Drop Off	Bags
Littleton	Drop Off	Bags
Orford	Drop Off	Coupons
Sanbornton	Drop Off	Bags
Whitefield	Drop Off	Bags

CWS would support legislative initiatives that would create statewide incentives for the institution of PAYT programs. CWS considers PAYT to be the most promising means to achieve appreciated increases in reuse and recycling.

4.2.2 Mandatory Recycling

Many towns and cities in New Hampshire have passed ordinances which require residents to recycle certain materials. In some case, the ordinance is strictly enforced – in others, it is used to simply encourage recycling. Mandatory recycling is a helpful recycling and diversion tool in that it can employ the force of law to bring about maximum participation. The following is a list of New Hampshire municipalities which have local mandatory recycling ordinances of some type, located within the service area of CWS transfer stations, hauling divisions, and the NCES landfill.

Albany	Auburn	Bridgewater
Alstead	Barnstead	Brookfield
Alton	Barrington	Campton
Andover	Bartlett	Candia
Antrim	Bethlehem	Canterbury
Ashland	Bradford	Carroll

Center Harbor	Jackson	Plymouth
Chester	Jaffrey	Rumney
Chichester	Jefferson	Salem
Claremont	Keene	Sanbornton
Colebrook	Lancaster	Sandwich
Conway	Landaff	Shelburne
Croydon	Lebanon	Springfield
Dalton	Lee	Stark
Danbury	Lincoln	Strafford
Deering	Lisbon	Stratford
Derry	Litchfield	Sunapee
Dorchester	Littleton	Sutton
Durham	Lyman	Swanzy
Eaton	Lyndeborough	Temple
Effingham	Madison	Thornton
Ellsworth	Marlow	Wakefield
Epsom	Meredith	Warner
Francestown	Milan	Warren
Freedom	Milford	Washington
Goffstown	Milton	Waterville Valley
Gorham	Moultonborough	Weare
Graton	New Boston	Whitefield
Greenfield	Northumberland	Wilmot
Greenville	Pelham	Wilton
Hanover	Peterborough	Windham
Hebron	Pittsburg	Wolfeboro
Holderness	Pittsfield	Woodstock
Hopkinton		

4.2.3 Curbside Recycling

Collection of recyclables at the curb is considered the most convenient method of recycling for residents, as well as the most successful in terms of participation rate and percentage of the waste stream collected as recyclables and diverted from disposal facilities. The following communities offer curbside pickup of recyclables and are located in the general service area of the landfill or are in areas serviced by commercial waste haulers which may bring waste to NCES:

Municipality	Collection Method	Operated by
Berlin	Curbsort	Municipality
Goffstown	Commingled	Private Hauler
Gorham	Source Separated	Municipality

Hanover	Curbsort	Private Hauler
Hudson	Commingled	Private Hauler
Laconia	Commingled	Private Hauler
Lancaster	Curbsort	Private Hauler
Londonderry	Commingled	Private Hauler
Manchester	Commingled	Private Hauler
Milan	Curbsort	Private Hauler
Northumberland	Curbsort	Private Hauler
Plainfield	Commingled	Private Hauler
Randolph	Curbsort	Private Hauler

4.2.4 Androscoggin Valley Regional Refuse Disposal District

The Androscoggin Valley Regional Refuse Disposal District (AVRRDD), is comprised of the Coos County communities of Berlin, Jefferson, Stark, Dummer, Milan, Randolph, Gorham, Groveton, and Errol. While most of the MSW from these communities is disposed of at the Mt. Carberry Landfill, several independent commercial waste haulers bring MSW and C&D to NCES. The District has expressed a strong interest in utilizing NCES as a back-up facility for its disposal needs.

The District has a very comprehensive recycling and diversion program, including curbside recyclables collection in some of its member communities. The District also owns its own material recovery facility for processing materials collected. The District processes approximately 2,221 tons of recyclables and 2,000 tons of compost per year.

4.2.5 New Hampshire Communities' Recycling Tonnages

According to information obtained from the New Hampshire Governor's Recycling Program and compiled by DES, the following communities, within the service areas of NCES, its transfer stations and hauling divisions, have attained the listed corresponding recycling tonnages.

Town	Recycling Tons-1999	Town	Recycling Tons -1999	Town	Recycling Tons - 1999
Ashland	180	Hanover	1,116	Sanbornton	344
Bedford	1,500	Hopkinton	624	Stark	22
Bethlehem	120	Jefferson	14	Sunapee	669
Candia	313	Lancaster	686	Sutton	151
Carroll	45	Lisbon	232	Thornton	262
Claremont	187	Littleton	1,347	Wakefield	436
Croydon	41	Madison	92	Warren	34
Danbury	54	Meredith	622	Waterville Valley	15
Dunbarton	174	Monroe	5	Whitefield	237

Enfield	340	Northumberland	100	Wolfeboro	851
Franconia	115	Plymouth	1,388		
Gorham	289	Rumney	198		
Grantham	170	Salem	2,600	Total	15,573

4.3 Specific On-Going Efforts of NCES and CWS to Assist NH in Attaining the 40% Waste Diversion Goal

The waste diversion goals set forth in RSA 149-M are cumulative. The state's goal is to show a reduction in solid waste disposal on a per capita basis and not necessarily a specific weight reduction amount at each permitted facility. Therefore, if it can be demonstrated that a reduction in solid waste occurs at the source (*i.e.*, curbside, transfer station, recycling facility), it is not necessary to show an additional 40% weight reduction at the ultimate disposal facility. The statute is intended to assist the state in achieving an *overall* 40% reduction in solid waste requiring disposal by the year 2000. The most recent data available indicates the state is currently achieving a waste diversion rate of about 23%.

4.3.1 CWS's Recycling Philosophy

In 1977, CWS developed and operated Vermont's very first recycling facility and began offering our customers recycling services. CWS was motivated by two very strong beliefs – first that recycling was the right thing to do environmentally and, second, that recycling was destined to become an important part of a comprehensive waste management strategy. Our early capital investment matched that motivation as the company subsidized recycling heavily during those years. Today, CWS is one of New England's largest recyclers.

CWS is regarded by many as the pioneer of recycling in New England. From the time of CWS's development of the first material recovery facility in the State of Vermont in 1977 to the acquisition of its many recycling subsidiaries, CWS has demonstrated a long history and a continued belief in recycling as a fundamental cornerstone in an environmentally sound, integrated solid waste management program. The direct benefits to New Hampshire solid waste districts, municipalities, commercial businesses, and residents are explained in more detail in subsequent sections.

As of March 1, 2002, CWS operates over 30 recycling or processing facilities. CWS processes more than 20 classes of recyclable materials originating from a municipal solid waste stream, including cardboard, office paper, containers and bottles.

NCES and CWS have taken steps to divert waste from the landfill through recycling programs for recyclable components of municipal solid waste and for C&D. These programs include discounted curbside and drop-off recycling in Bethlehem provided by NCES, leaf and yard waste composting at the NCES facility, recycling associated with CWS transfer stations and hauling companies, composting in Hanover, C&D recycling at the NCES facility, and use of dirt fines from the ERRCO facility. These

efforts are amplified below.

4.3.2 Curbside Recycling Program

NCES has initiated a curbside recycling program which is available to residents in the Bethlehem Village District. NCES distributed recycling bins to residents in the District free of charge and provides bi-weekly curbside collection of the following recyclables:

Plastic	Glass	Newspaper
Cardboard	Tin/aluminum cans	

This program is subsidized by NCES to the extent that the Town only pays one-half of the costs normally charged for this service.

4.3.3 NCES-Operated Recyclables Drop-Off Center

NCES has provided a transfer station and recycling center to serve the residents of Bethlehem. The design, permitting, construction, and operation of this transfer station is and has always been provided by NCES free of charge to Bethlehem residents. NCES enables Bethlehem residents to recycle the following items:

Glass	Plastic	Newspaper
Cardboard	Aluminum	Tin
Scrap Metal	White Goods	Tires
Mixed office paper	Boxboard	

NCES also operates a trailer at the site where residents can drop off items which can be reused by other residents and would otherwise be disposed.

NCES also operates a drop-off area for leaf and yard waste and brush from Bethlehem residents. Last year approximately 225 tons of recyclables were collected at the drop-off from Bethlehem residents alone, and approximately 35 cubic yards of leaf and yard waste were composted.

4.3.4 Gobin Disposal Systems/Hoyt Trucking, Inc. - Newport, NH

Gobin Disposal Systems/Hoyt Trucking, Inc. (GDS/Hoyt) is a CWS company which operates a transfer station in Newport and provides commercial recycling services as discussed below.

• Newport Recyclables Drop-Off Center

GDS/Hoyt operates a solid waste transfer and recyclables drop-off center. GDS/Hoyt

provides the recycling services at no charge. Recyclables accepted by GDS/Hoyt include newspaper, cardboard, glass, plastics, aluminum, tin, scrap metal, white goods and tires. Approximately 275 tons per year of recyclables are collected in this manner.

To encourage cardboard recycling, GDS/Hoyt provides recycling containers to commercial customers on its routes at locations in the following New Hampshire towns:

Lebanon	Hanover	Canaan
Grantham	Enfield	Orange

GDS/Hoyt recycles approximately 1,000 tons per year of mixed recyclables from its facility in Newport, New Hampshire. GDS/Hoyt received a permit modification in 2000 increasing the amount of MSW and C&D that may be processed through the transfer station. In 2001 GDS/Hoyt received a permit modification to tip MSW on a sorting floor to sort MSW for recycling.

4.3.5 Hanover Curbside Recyclables Collection Program

For several years, CWS, through its Northeast Waste hauling division, has been performing curbside residential collection of recyclables for the Town of Hanover under contract. Collection is five days per week, picking up recyclables from approximately 250 households per day. The following recyclables are picked up curbside:

Mixed Paper	PETE	HDPE
Aluminum	Tin Cans	Clear, Green and Brown Glass
Boxboard	Cardboard	Newspaper

Approximately 700 tons per year of mixed recyclables are collected curbside each year.

4.3.6 Dartmouth College Recycling Program

Northeast Waste also provides recycling services for Dartmouth College, by providing open-top roll-off containers and compactor containers at various locations throughout the College campus for the collection of the following:

Mixed Paper	Newspaper	Cardboard
HDPE	PETE	White Ledger
Boxboard	Aluminum	

Approximately 600 tons per year of recyclables are collected and processed through this program.

4.3.7 Atlantic Waste Systems North – Salem, NH

Atlantic Waste Systems North (Atlantic) is currently the largest hauling division subsidiary of CWS located in New Hampshire and operates several commercial cardboard collection routes daily, as well as providing and servicing open roll-off containers and compactors for large commercial generators of cardboard, such as department stores, grocery stores, etc. In addition, Atlantic encourages recycling by supplying totes to commercial customers to collect and recycle glass, plastics, aluminum and office paper for those generators with sufficient volume of these recyclables to make recycling feasible.

• Salem, NH

Atlantic operates the Salem (NH) Municipal Transfer Station and Recycling Center under contract. Recyclables such as glass and plastic are transported to KTI (another CWS subsidiary) for processing. Scrap metals are taken to a metal recycler and wood is transported to a C&D processing facility, also for recycling. The approximate annual tonnages of the various recyclables (based on year 2001 data) are as follows:

Refrigerators	408
Cardboard	166
Commingled Containers	698
C&D	1,384
Metals	718
Newspapers	<u>957</u>
TOTAL	4,331

Some of these materials are collected curbside, by subscription.

• Windham, NH

Atlantic also provides commercial recycling services in Windham for numerous commercial accounts. Newspaper, cardboard, and other recyclables are collected in a compartment truck and transported to the municipal transfer station/recycling center in Windham.

Atlantic provides residential curbside collection of recyclables in Windham. The annual tonnage of recyclables collected at the curb in Windham was 371 tons in 2001.

• Derry, NH

Atlantic provides recyclables collection services in Derry for such recyclables as newspaper, cardboard, aluminum, tin and glass. Recyclables are transported via 100-yard trailers to KTI, Inc. for processing and shipment to market.

Atlantic provides residential curbside collection of recyclables by subscription in Derry. The annual tonnage of recyclables collected at the curb in Derry was 674 tons in 2001.

Additional recycling tonnages include 334 tons of cardboard per year from front load routes and over 1,500 tons per year of cardboard and mixed paper from roll-off collection.

4.3.8 Atlantic Waste Systems North – Allenstown, NH

Atlantic Waste Systems North (Atlantic) also operates out of Allenstown, NH, and provides extensive solid waste management services to a number of communities in the Lakes Region. This subsidiary provides hauling services for solid waste, construction and demolition debris, and/or recyclables, including scrap metal, to the towns of: Northwood, Freedom, Wakefield, Milton, and Wolfeboro. Approximately 1,200 tons per year of recyclables are hauled, processed and/or managed from these towns by Atlantic. In addition, Atlantic provides cardboard recycling containers to its commercial customers to encourage cardboard recycling.

4.3.9 Resource Optimization Technologies (ROT) Composting Project – Hanover, NH

The ROT composting project in Hanover is another example of CWS's commitment to the state's hierarchy of solid waste disposal options. The ROT project is an in-vessel system for composting the organic fraction of the waste stream, with wastewater treatment plant sludge, food waste, mixed paper products, and yard waste as acceptable feed stocks. The Town of Hanover, Dartmouth College, and CWS are the key partners in the project. This facility is an example of a public/private partnership working together to compost organic waste. New England Organics, a CWS affiliate, is the operating partner of the ROT Project. The ROT facility has been in existence since 1998.

CWS is the major equity partner in this project, having contributed over \$750,000 for development and construction costs. CWS also subsidized the operating costs of the facility. During the course of a year, the facility composts approximately 330 tons of food waste generated by Dartmouth College, 1,050 tons of WWTP sludge from Hanover, and 375 tons of paper waste from Dartmouth-Hitchcock Medical Center, processing more than 1,750 tons of organic wastes per year into compost.

Recyclables are extracted from the solid waste stream as facility constraints will allow. Recyclable C&D is pulled out and transported to ERRCO for processing and recycling. Wood, aggregates, and scrap metals are also extracted and recycled. Based upon the last six months of full operation, this facility has recycled 445 tons of metal and 185 tons of aggregate, 2,400 tons of recyclable C&D has been sent to ERRCO, and 4,100 tons of waste have been utilized by waste-to-energy facilities.

4.3.10 New England Organics – f/k/a BFI Organics – Diversion of Organic Wastes

CWS acquired BFI Organics in March 2000 and changed its name to New England Organics, a wholly-owned subsidiary of CWS. New England Organics recycles and beneficially reuses such organic wastes as municipal biosolids, boiler fuel ash, food processing waste, paper mill sludge, and other source-separated organic materials. New England Organics is the largest organic waste management entity operating in New England and successfully recycles over 250,000 tons of residuals each year. New England Organics currently has contracts with the towns of Littleton, Seabrook, and Newington to manage their biosolids. On an annual basis, Littleton has 950 tons of biosolids that are being made into compost. Seabrook has 1,709 tons of biosolids that are also being made into compost. New England Organics manages the short paper fiber from Wausau Paper in Groveton which has 15,000 tons each year of short paper sludge that is being made into compost. All of this material is land-applied, made into compost, or manufactured into top soil for closure of landfills.

4.4 Additional Efforts to Achieve 40% Weight Reduction in Solid Waste Streams and to Divert Recyclable Material from Landfills

NCES and the subsidiaries of CWS operate the NCES landfill and their recycling and diversion programs in a manner which assists the State in achieving the implementation of the hierarchy and goals under RSA 149-M:2 and RSA 149-M:3. Activities to reduce the amount of solid waste landfilled currently include reuse, recycling, and composting of material which is collected. This is done to assist the State in achieving the 40% weight reduction goal, as well as assisting in the goal of not disposing of recyclable materials in a lined landfill with a leachate collection system. NCES uses the CWS components of the integrated solid waste management system (i.e., CWS transfer stations, curbside collection, and commercial hauling divisions), as well as the non-CWS components (i.e., independent haulers, municipal transfer stations) to accomplish these goals as follows:

4.4.1 Contract Operations of Municipal Transfer Stations

CWS's companies operate municipal transfer stations in Salem and Bethlehem and a recyclables drop-off in Newport. This direct level of involvement with the communities that are the major generators of solid waste affords CWS the opportunity to be a critical part of an integrated system which separates and diverts recyclable materials to authorized facilities for reuse/recycling. At the municipal transfer stations CWS does a wide range of recycling. For example, in Salem CWS offers recycling of aluminum products, glass, plastics, tin, mixed paper, newspaper, and cardboard. In Bethlehem CWS offers a re-use center and recycling of cardboard, boxboard, mixed office paper, newspaper, junk mail, magazines, aluminum, tin, plastics (PET 1/ HDPE 2), paints, household batteries, automotive batteries, brush, leaves, residents used oil, textiles, glass, scrap metal, and tires. In Newport CWS offers recycling of plastics (PET, HDPE colored, and HDPE natural), tin, aluminum, scrap metal, glass, newspaper, OCC, mixed office paper, magazines, junk mail, tires, batteries, and

used motor oil from residents. CWS no longer operates the Madison Transfer Station.

CWS continues to work with these communities to upgrade existing recycling programs by providing recycling education and by suggesting improvements to increase the convenience and the participation rates for recycling in these communities. Newsletter mailings and facility postings, as well as conducting informational tours of these facilities for the townspeople, are done to further promote recycling and waste reduction at the source. All facilities have postings for materials that are and are not accepted for recycling. The Bethlehem facility has a full time attendant that walks people through what is accepted for processing. The GDS facility in Newport offers tours to area residents, schools, and other organizations. CWS provides handouts and mailings in the Upper Valley communities, including Lebanon and Hanover. For the residents of Salem, Windham, and Derry CWS provides a handout.

4.4.2 Municipal Contracts for Transportation and Processing of Recyclables

As previously stated, CWS and its subsidiary hauling divisions provide transportation and recyclables processing services for dozens of New Hampshire communities. CWS utilizes this vendor/customer relationship to communicate recycling opportunities and recycling program improvements to contracted municipalities to increase participation rates.

4.4.3 Efforts at CWS's Transfer Stations

4.4.3.1 GDS/Hoyt Transfer Station—Newport, NH

This facility sorts and recycles materials to include clean wood, ERRCO wood, brick, masonry, tires, Ruger foundry sand, and metals. Cardboard is handled through the facility's small materials recovery facility. A change in the Facility Operating Plan currently under consideration would allow for drop-off of recyclables by any area resident from New Hampshire.

The closure of the Town of Hartford, Vermont's, C&D landfill (which received C&D waste from towns in New Hampshire) and the City of Keene landfill, along with the closure of the Claremont landfill (which also receives C&D waste) will limit waste disposal options for the area. It appears likely that there will be an increased need to transfer additional C&D waste out of this geographic area. Processing and recycling of the C&D wastes at the GDS facility removes waste that would typically be landfilled, thereby increasing diversion of recycled materials from landfills.

Separating recyclables and reusable/recyclable materials from C&D will help achieve the 40% minimum weight reduction goal and prevent these useful items from being disposed of in a lined landfill with leachate collection.

4.4.3.2 Atlantic Waste Systems North-Allenstown, NH

Wood, aggregates, metals and cardboard are removed from the waste stream at this facility. Materials capable of being sorted are handled accordingly. As operational constraints allow, MSW received is also sorted for waste-to-energy utilization.

4.5 Efforts at NCES to Achieve the 40% Weight Reduction Goal and Avoid Disposal of Recyclable Materials in a Lined Landfill with a Leachate Collection System

4.5.1 C&D Recycling Program

NCES continues to improve its C&D recycling program at the landfill site to divert waste from landfill disposal. NCES currently removes recyclable material such as wood, aggregates, metal and other material from the waste stream. Additionally, NCES has applied for permits to grind C&D to create a certified waste derived product to be used as Alternate Daily Cover (ADC). NCES also transports sorted C&D materials to ERRCO in Epping, New Hampshire.

4.5.2 ERRCO Fines as ADC

As long as it is economically feasible, NCES plans to continue to use ERRCO fines as ADC thereby "closing the loop" and contributing to the financial viability of the State's largest C&D recycler.

4.5.3 Recyclables Drop-Off for Commercial Haulers

As part of its commitment and increased efforts in achieving the 40% weight reduction goal and avoidance of disposing of recyclables in the landfill, NCES has contracted with the Town of Littleton to develop a regional recyclables drop-off facility in the town. NCES provides \$15,000.00 per year to Littleton in support of these efforts. The transfer station is obligated to accept recyclables from NCES customers, to perform public education, and to conduct outreach to North Country haulers, communities and commercial generators to create, expand, and improve recycling programs.

4.5.4 Educational Programs/Outreach/NCES Reporting Requirements

In furtherance of RSA 149-M:3 NCES will conduct educational programs for facility users and customers which it serves to promote source reduction activities. This effort will be done to further promote recycling and waste reduction at the source through:

- Newsletter mailings and facility postings
- Conducting informational tours of the NCES facility

4.5.5 Independent Haulers

To attain the goals under RSA 149-M:2 and RSA 149-M:3 when non-CWS haulers are using NCES, NCES has communicated to haulers that the Littleton facility is now accepting recyclable materials, as is the Plymouth recycling center.

4.5.6 Regional Leaf and Yard Waste Composting Program

In order to assist the State in achieving its goals under RSA 149-M:2 and M:3; NCES, will expand its leaf and yard waste composting program to service the residents, businesses, communities and solid waste haulers throughout the North Country. NCES will offer its facilities and resources to anyone who may be interested, in order to insure that these materials are not disposed of in the landfill but are recycled and reused as a product of composting. Acceptance of these materials will be free to all residents and businesses in the NCES service area. Towns and haulers have been notified of the program, which should be available in the Spring of 2002.

4.5.7 Back Yard Composting Bin Distribution Program

Again, in a concentrated effort to reduce the solid waste stream disposed at NCES, NCES provides a location for distribution of backyard composting bins which allow residents and businesses to remove the organic fraction of the waste stream, such as food waste, and recycle this material through composting.

4.5.8 Continued Efforts of Resource Optimization Technologies and New England Organics

In order to support the hierarchy of integrated solid waste disposal solutions, NCES, through the CWS subsidiary of New England Organics, works to increase the amount of organic wastes that are beneficially reused and recycled through composting. New England Organics began managing this project in June 2000. Since that time the facility has been handling 100% of the biosolids from the Town of Hanover, 100% of the source separated food waste generated by Dartmouth College, and paper waste from Dartmouth Hitchcock Medical Center. In addition the facility has minimized the purchasing of bulking agent and instead has been using yard waste and brush from the Town and local landscapers. In 2001 the facility accepted over 1800 tons of these materials and produced over 1,500 tons of finished compost. The marketing program for compost has been extremely successful with approximately 25-30% output going for Dartmouth College landscaping needs with the remainder sold to area landscapers and growers.

It is presently intended that New England Organics will increase its efforts to recycle municipal biosolids, boiler fuel ash, food processing waste, short paper fiber and many other source-separated organic materials. New England Organics has been a national leader in developing and expanding

markets for recycled materials. New England Organics has been successful at marketing and distributing horticultural products such as soil amendments, potting soil, decorative mulches, erosion control products and biosolids compost. New England Organics continues to be instrumental in diverting the organic waste stream from landfills into recycling alternatives.

4.5.9 Computers/Electronics Recycling Program

According to the New Hampshire Governor's Recycling Program, it is estimated that for every three computers manufactured, two existing computers become obsolete, and that 12 million personal computers are thrown away in landfills each year. A large percentage of computer related components are recyclable. Recycling old computers allows for the plastics and precious metals to be recycled, the computer chips to be reused, and proper disposal of the hazardous items within the computer.

NCES is working with North Country Environmental Services out of Barre, Vermont, a universal waste management contractor that accepts computers and other components for processing. NCES has designated shelf space at its Bethlehem facility for a drop and swap program. NCES is capable of storing up to 100 computers and components. Any amount in excess will be transported to the Barre facility for processing.

4.5.10 Waste Reduction and Recycling Incentive Program

NCES will establish a recycling incentive program for contracted New Hampshire communities, where municipalities are given monetary incentives to encourage recycling and waste reduction. NCES will take the volume of recycling generated in Towns serviced during 2001 as a base line for incentive in future years. The participating Towns will be notified of this program along with its 2001 quantities by May 2002. This will give those Towns the ability to verify the base line quantities and provide comment.

5.0 PROMOTING THE GOALS OF WASTE MANAGEMENT PLANS

RSA 149-M:11, III (c) requires the department to consider the ability of any proposed waste disposal facility "to assist in achieving the goals of the state solid waste management plan" and local plans approved by the department. Stage IV of the NCES landfill would advance the objectives of both the state solid waste management plan and the plans of several waste management districts in the facility's service area. The following discussion identifies particular aspects of the plans Stage IV would further and demonstrates how the proposed facility would promote the plan's goals.

5.1 The State Solid Waste Management Plan

In 1993, the department published the New Hampshire Solid Waste Management Plan. The Plan consists of two volumes. Volume I is entitled "The Action Plan" and Volume II comprises the

appendix.

5.1.1 Themes and Goals

The Plan is structured in terms of themes and goals. The themes are the overarching principles driving the Plan. The goals constitute the state's specific objectives for its comprehensive waste management regime. Plan, v. I at I-4 and -5.

Common to the themes and goals is the importance of a "cost effective" system of solid waste management. It is one of the Plan's four themes that solid waste is to be managed "to protect human health and the environment in the most cost effective manner." *Id.* at I-4. Among the goals of the Plan is ensuring "that adequate capacity is available in the most cost effective manner for proper management of New Hampshire's solid waste." *Id.* at I-5. The Plan therefore requires that the state's waste management decisions be guided by the effect they will have upon the cost of waste disposal services for New Hampshire's citizens.

The NCES facility is the only commercial competitor of the Waste Management, Inc. disposal facilities in the state. Waste Management owns and operates the TLR-III facility in Rochester and the waste-to-energy facilities in Concord and Claremont. Were the NCES facility closed, Waste Management, Inc., would be the only significant source of waste disposal capacity in the state. The absence of any meaningful competition in the waste industry would defeat the Plan's goal of the management of solid waste and ensuring adequate capacity "in the most cost effective manner." Permitting the NCES facility will therefore promote not only a goal of the Plan but one of its fundamental principles as well.

5.1.2 Goals of the State Plan

5.1.2.1 Goal 1: Education

The Plan aptly acknowledges that public education about solid waste management is the key to achieving its other objectives. It is therefore crucial that the state draw upon "[t]he continuous involvement of participants who are knowledgeable in the issues of solid waste" to establish and implement a successful waste management plan. Plan, v. I at II-1. The Plan calls for the private sector to sponsor and participate in local and regional educational initiatives and keep the public informed about "efforts to manage their [own] solid waste" *Id.* at II-6.

NCES is a part of Casella Waste Systems, Inc. CWS is a regional company with knowledge of and expertise in waste management issues unique to the Northeast. CWS chief executive officer, John Casella, served as a member of the Governor's Solid Waste Task Force, bringing the company's expertise to bear in an effort to formulate the state's future waste management strategies.

In the preceding section of this statement, NCES has described the actions it undertakes to help reach the diversion goal set by the general court. As a part of those programs, NCES contemplates making citizens aware of initiatives underway in the region to reduce, reuse, and recycle. This will have the dual benefit of appealing to the ordinary citizen to “practice source reduction and recycling at home and at work” (Plan, v. I at II-7) and providing information on how this goal can be accomplished.

NCES is *the* waste disposal expert in the North Country. The expertise and integrated nature of CWS will enable NCES to explore the full range of diversion opportunities with the communities it serves. Through the many initiatives outlined in this statement, NCES is able to fulfill the educational responsibility it has in the region. By virtue of its important role in the state, moreover, CWS can continue to provide assistance to the state in ensuring that it implements an achievable and cost-effective waste management plan.

5.1.2.2 Goal 4: Diversion

Although NCES has addressed diversion at length above (see §§ 4.4 - 4.5), it is worth noting the Plan’s recognition that, “a key factor in a successful recycling program is the availability of markets able to utilize what has been separated from the waste stream.” Plan, v. I at IV-3. In other words, recyclables cannot be considered diverted if they are not in fact recycled.

Here again the integrated nature of NCES’s parent, CWS, provides opportunities to achieve actual recycling in the North Country. CWS has direct access to markets for all types of materials diverted from the waste stream. Particularly in those communities with PAYT programs, a readily available and inexpensive means of getting recyclables to market will provide even greater incentives to recycle.

With respect to composting (*id.* at IV-6), CWS’s participation in the ROT facility in Hanover will enable it to work with the department to create regional composting facilities. NCES’s yard waste composting program will become a regional program, likely in Spring 2002.

Because of the rural nature of the North Country, disposal of yard waste for many is simply a matter of placing it in “the woods.” Still, there is a substantial organic fraction in any waste stream which has not been subjected to a composting strategy. As a part of its community-by-community effort, then, NCES contemplates promoting collection and composting of organic matter to the extent feasible.

Depending on the willingness of towns to participate, it would be possible to collect compostable wastes at transfer stations and transport them to regional compost yards. CWS believes that given adequate participation, it could provide hauling services for the compost yards and train municipalities in the construction and operation of such facilities.

5.1.2.3 Goal 6: Adequate Capacity

In 1993, the Plan observed that in planning for future capacity, “several factors” will affect the adequacy of capacity. These factors include the extent to which the state achieves the 40% diversion goal and the extent to which out-of-state waste is disposed of in New Hampshire. Plan, v. I at VI-10. Since 1993, substantial quantities of out-of-state waste have been disposed of in New Hampshire, and the state has fallen well short of its diversion goal.

One of the strategies contained in the Plan to ensure adequate future capacity in cooperation with the private sector “to promote continued private sector initiatives and to insure that solid waste solutions are cost effective” Id. at VI-16. This strategy reflects a continuation of the state’s promotion of “private sector involvement to provide solid waste facilities within the state.” Id. at VI-10.

The Plan also recognizes, however, that with private sector involvement comes the use of some capacity “for waste generated by other states.” Id. Indeed, this is often a desirable outcome because “[g]eographical borders that separate states oftentimes limit solutions that are economically and environmentally acceptable.” Id. In addition, commerce clause jurisprudence makes it clear that a state may not regulate solid waste in such a way as to burden or prevent the disposal of out-of-state waste in the state.

The Plan therefore recognizes that it is problematic to forecast and regulate disposal capacity. To ensure adequate capacity, then, it is crucial that overall capacity be permitted at some substantial margin above New Hampshire’s projected generation to allow for disposal of out-of-state waste. As the Plan puts it, “[a] critical consideration in evaluating adequate capacity for New Hampshire’s waste is whether [the state’s disposal] facilities will displace out-of-state waste for New Hampshire waste.” Id. at VI-10.

NCES expects that a substantial portion of the solid waste disposed of in Stage IV will continue to come from New Hampshire communities and transfer stations. Consistent with the Plan’s recognition of the increasing importance of “eco-regionalism,” some waste will also come from nearby states. Given that RSA 149-M:11, III (c) requires the department to consult the Plan in addressing public benefit, it is plain that the department’s capacity planning cannot be based upon the assumption that only New Hampshire waste will be disposed of in New Hampshire’s landfills. In other words, the capacity determination the department conducts under RSA 149-M:11, III (a) and V does not control the amount of capacity permissible for a proposed facility because section III (c) mandates that out-of-state waste be taken into account as well.

NCES provides a safety margin of capacity during the life of Stage IV, and the operation of Stage IV enables NCES to continue to develop its Bethlehem site to provide capacity from 2007 on when at least one of the Waste Management waste-to-energy facilities may well close and the TLR-III

landfill will reach capacity. NCES is a crucial part of the “private sector involvement” the state relies upon for its waste management. Id. at VI-10. Approval of Stage IV therefore promotes yet another of the goals of the Plan.

5.1.2.4 Goal 7: Integrity of Disposal Facilities

The seventh goal of the Plan is to make certain that solid waste facilities have sufficient integrity to protect human health and the environment. Plan, v. I at VII-1. This translates into regulatory requirements meant to minimize the risks associated with disposal methods. With respect to waste-to-energy facilities, for example, the primary potential environmental impacts arise from air emissions and ash disposal. Id. at VII-2. Landfills, on the other hand, must be designed and operated to protect ground and surface water and to control landfill gases. Id. at VII-4.

The NCES facility is constructed and operated in accordance with the department’s rigorous standards. In fact, upon its acquisition of the landfill, NCES excavated an old unlined landfill site on its property and relocated the waste and a margin of soil to a double-lined phase of Stage I. This provided incalculable benefits to local groundwater; it also went well beyond what is typically required in New Hampshire for closure of unlined landfills, namely capping without removal.

All of the waste at the NCES site is now contained in double-lined cells with leachate collection systems, sophisticated monitoring, and landfill gas management. Gas and leachate management were recently combined through a leachate evaporation system. The landfill is therefore constructed and operated in accordance with the best available technology, consistent with Goal 7 of the Plan. Closure and 30-year monitoring of the landfill is pre-funded as an additional safeguard against environmental degradation.

The Plan also calls for siting guidelines for facilities, including consideration of the effect of disposal costs as capacity becomes more scarce, energy consumption and cost of transporting solid waste over greater distances, and the permitting of new “cost effective” facilities to displace “substandard facilities.” Id. at VII-11. All three of these factors militate in favor of the continued operation of NCES’s Bethlehem site. Closure would lessen competition in waste disposal services, create capacity pressure, and transportation of solid waste from the far-flung North Country communities to Southern or Central New Hampshire would significantly increase disposal costs. The presence of the NCES landfill would continue to provide an alternative to environmentally unsound and, at times, unlawful means of waste disposal.

5.2.1 Consistency with District Plans

The NCES facility provides disposal capacity for solid waste generated in at least 31 New Hampshire solid waste management districts. While it is unnecessary to survey all of the districts’ plans

here, a sampling is an appropriate way to satisfy the requirements of RSA 149-M:11, III (c).

A listing of the communities which generate MSW and C&D for disposal at the NCES facility and the solid waste districts they are members of is provided below:

Communities	Solid Waste District
Albany and North Conway	Lower Mountain District
Allenstown	Single Town District
Bath, Haverhill, Monroe and Woodsville	Ammonoosuc District
Bedford	Single Town District
Bennington	Tri-Town District
Berlin, Errol, Gorham, Jefferson, Milan and Northumberland	Androscoggin District
Bethlehem, Dalton, Franconia, and Littleton	Upper Grafton-Lancaster Area (plan never finalized)
Bradford	Single Town District
Bristol	Single Town District
Brookfield and Wakefield	Wakefield - Brookfield
Candia	Three-Rock District
Carroll	Twin Mountain District
Colebrook, Columbia, Dixville Notch, Pittsburg and Stratford	Upper Connecticut River District
Franklin	Single Town District
Freedom, Madison, Ossipee and Tamworth	Bear Camp and Ossipee River District
Hebron	Hebron-Bridgewater
Hopkinton	Hopkinton/Webster
Jackson and Bartlett	Jackson-Bartlett-Harts Landing
Laconia	Laconia-Gilford-Belmont
Lincoln and North Woodstock	Lincoln-Woodstock
Lisbon	Lisbon-Lyman-Landaff
Londonderry	Single Town District
Meredith, Newport (Gobin) and Sunapee	Sullivan County Regional Refuse
Milford	Nashua Region District
Orford and Piermont	Upper Valley District
Plymouth, Rumney, Thornton, Waterville Valley and Wentworth	Pemi-Baker District
Salem	Single Town District
Sanbornton	Single Town District
Sutton	Single Town District
Tilton	Single Town District

5.2.1.1 Pemi-Baker Solid Waste District

The P-BSWD Amended Solid Waste Management Plan specifically designates the NCES facility in Bethlehem as the disposal site for non-recyclable MSW for the towns of Waterville Valley, Rumney, Plymouth, and Dorchester. The same municipalities in the P-BSWD depend upon the NCES facility for disposal of C&D and bulky waste.

5.2.1.2 Town of Salem Solid Waste District

The Town of Salem Solid Waste District (Salem) District Plan states that Salem has contracted for disposal of its MSW with Ogden Martin through the year 2007. Salem's plan cites the Turnkey and NCES landfills as alternative disposal options should any problem arise with Ogden Martin.

5.2.1.3 Ammonoosuc Solid Waste District

The Ammonoosuc Solid Waste District Solid Waste Management Plan provides that each member municipality shall separately decide upon a disposal site. The towns of Bath, Haverhill, Monroe, and Woodsville dispose of their C&D and MSW at the NCES facility in Bethlehem.

5.2.1.4 Upper Valley Solid Waste Management District

This district last updated its district plan in September 1991. In Section VI of its plan the district listed its first policy as providing "Maximum flexibility . . . for each member community to pursue its locally preferred option." The district's plan also recognized that "The principal long term disposal options are two major lined landfills, in Lebanon and Bethlehem. Each serves as a contingency option for the other." The district valued having these two principle options, stating, "This is not an evasion of the question: when the Upper Valley Landfill in Thetford closed, Lyme and Orford were able to find other disposal options in a matter of days." By providing options for contingency planning by member towns, and actual use of the NCES facility by the town of Piermont, the development of Stage IV would further the goals of the Upper Valley Solid Waste Management District's district plan.

5.2.1.5 Town of Carroll Solid Waste District

This District's plan, which it submitted to the department in June 1992, states that the district expected to enter into a 20-year contract for disposal with Consumat Sanco, now NCES. Although the District did not enter into a 20-year contract, it has entered into a series of shorter-term agreements, and currently has a five-year contract with NCES. The continued operation of NCES's landfill in Bethlehem, and specifically the development of Stage IV, is therefore consistent with attaining the goals set in the Carroll Solid Waste District's plan.

6.0 CONCLUSION

The NCES facility provides needed capacity on both a regional and statewide basis as evaluated over the statutory 20-year planning period, it plays a vital part in the state's waste disposal hierarchy, NCES and its affiliates actively promote the state's diversion goals, and the facility advances both the state solid waste management plan and its goals and is consistent with several district plans. The facility therefore satisfies the statutory criteria for public benefit.

Table 1
Projected Population and
Waste Generation in New Hampshire through 2024

Years	Sum of Projected Population	Projected MSW Generation (Tons)	Projected C&D Generation (Tons)	Quantity Prior to Waste Diversion (Tons)	40 Percent Diversion (Tons)	Anticipated Diversion Rate	Anticipated Diversion (Tons)	Special Waste (Tons)	Net Quantity Requiring Disposal 40% Diversion (Tons)	Net Quantity Requiring Disposal Escalating Diversion (Tons)
2005 - 2009	6,698,430	7,823,766	1,266,003	9,089,770	3,635,908	26%	2,363,340	1,090,772	6,544,634	7,817,202
2010 - 2014	7,036,005	8,218,054	1,329,805	9,547,859	3,819,144	33%	3,150,793	1,145,743	6,874,458	7,542,808
2014 - 2019	7,458,813	8,711,893	1,409,716	10,121,609	4,048,643	40%	4,048,643	1,214,593	7,287,558	7,287,558
2020 - 2024	7,846,735	9,164,986	1,483,033	10,648,019	4,259,208	40%	4,259,208	1,277,762	7,666,574	7,666,574
Totals									28,373,225	30,314,142
									28,400,000	30,300,000

Notes:

1. The Updated Population Projections for 2005, 2010, 2015, 2020, and 2025 were calculated using the 2000 Census population data and the NH 1997 Population Projections for 2000, 2005, 2010, 2015, and 2020 found in "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October, 1997. The following formula was used for each calculation:

$$[(X+5)-X]+Y = \text{Updated Projected Population}$$

where:

X is the NH 1997 Projected Population of the year desired for updating

X + 5 is the NH 1997 Projected Population five years beyond the year desired for updating

Y is the previous Updated Projected Population figure. (for the 2005 case, Y is the 2000 Census Population figure.)

- For the purposes of this evaluation, linear population growth was assumed for the years in between.
- Projected generation of municipal solid waste (MSW) is based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation rate of 6.4 pounds per person per day and includes residential and commercial municipal solid waste.
- The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.
- The 40% waste diversion factor is based on the statutory goal established in RSA 149-M:11. Data provided by PCAS indicates the actual diversion rate is currently approximately 23%. For purposes of evaluating the quantity of waste requiring disposal, NCEES has assumed a realistic diversion rate of 26% for the period of 2005 through 2009, escalating to 40% in 2015.
- Special waste volumes were estimated assuming that the quantity of special waste generated in New Hampshire is equivalent to 12 percent of the total MSW and C&D generated. This assumption is based upon data published by PCAS, reported disposal of special wastes, and that consistent with disposal of other solid wastes, 80 percent of the special waste disposed in N.H. is generated in N.H.

Table 2
Permitted and Potential Disposal Capacity Available for New Hampshire Waste (Tons)
2005 - 2024
(Standard Permits Included)

20-YR Totals	Lined Landfills				Waste-to-Energy				C&D Processing				Range of Disposal Capacity
	TLR-III	Mt. Carberry (permitted)	Mt. Carberry (historic)	Nashua	Conway	Lebanon	Charmont (Closure 7-1-07)	Concord	Concord (Closure in 2019)	LL&S	ERBCO	Turnkey (Closure in 2010)	
4,690,000	552,500	246,500	1,360,000	200,000	960,000	374,000	46,750	2,737,500	2,129,200	620,000	974,000	2,000,000	11,826,450 to 14,714,500
												600,000	11,800,000 to 14,700,000

Notes:

1. Data for TLR-III was provided by NHDES and is based on a permit modification dated August 18, 1999, which restricts tonnage to stated amounts through 2010. For the purpose of this evaluation, it was assumed that TLR-III capacity will be filled at the permitted rate.
2. Mt. Carberry is permitted to accept 32,500 tons of waste per year for an estimated site life through 2021. Historically, it has accepted 14,500 tons per year (TPY).
3. The disposal capacity of the Nashua facility is based on an annual fill rate of 80,000 TPY over an estimated site life through 2021.
4. The Conway facility serves the towns of Conway, Eaton and Albany with an assumed nominal disposal rate of 10,000 TPY.
5. Ash from the Concord Waste-to-Energy Facility is disposed at the Franklin Ash Landfill. PCAS indicates there is 8 years of capacity currently permitted at that facility. Combustion of waste reduces the tonnage requiring disposal by two thirds. The disposal capacity of the Concord facility was reduced to 2/3 the nominal capacity starting in 2010 to account for the ash.
6. The Charmont facility has a nominal capacity of 73,000 TPY. There is no dedicated disposal facility for the ash in New Hampshire. At its nominal capacity, about 24,300 TPY of ash is produced at the Charmont facility. Of the total disposal capacity, it has been assumed that 30,000 TPY will be dedicated for disposal of Vermont waste leaving 43,000 TPY of capacity for New Hampshire waste. Therefore, the net disposal capacity of the Charmont facility, absent a dedicated ash disposal location, is 18,700 TPY (43,000 - 24,300). The facility's contracted capacity and electricity sales contracts expire in 2007. For planning purposes, the Department should take this into account.
7. The Concord facility's contracted capacity (assuming exercise of a 10-year option) and electricity sales contract expire in 2019. Accordingly, in 2020 and beyond, the 182,500 tons now accepted at the facility will have to be disposed elsewhere.
8. The Franklin ash monofill has not been included in this table because the capacity of that landfill is offset by the ash generated by the waste-to-energy facility as indicated in Note 5.
9. C&D Processing capacity is based on New Hampshire C&D processed at the various facilities in 2000 and assumes that the facilities operate at the stated rates through the 20-year planning period. Note that operations at Turnkey may terminate when landfill operations in TLR-III cease, which is currently projected to be at the end of 2010.
10. The range in total disposal capacity considers the Concord and Charmont closures, cessation of C&D processing at Turnkey waste-to-energy facility, and historic vs. actual disposal at Mt. Carberry.

For Tables 3 - 7

1. The Updated Population Projections for 2005, 2010, 2015, 2020, and 2025 were calculated using the 2000 Census population data and the NH 1997 Population Projections for 2000, 2005, 2010, 2015, and 2020 found in "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October, 1997. The following formula was used for each calculation:

$[(X+5)-X]+Y$ = Updated Projected Population where:

X is the NH 1997 Projected Population of the year desired for updating

X + 5 is the NH 1997 Projected Population five years beyond the year desired for updating

Y is the previous Updated Projected Population figure. (For the 2005 case, Y is the 2000 Census Population figure.)

2. For the purposes of this evaluation, linear population growth was assumed for the years in between.
3. Municipalities listed are located within a 60-mile radius to the south of the NCES facility and the northern portion of the state.
4. Shading indicates towns currently served by the Conway or Lebanon landfills or the waste-to-energy facilities in Claremont or Concord.
5. Projected generation of municipal solid waste (MSW) based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation rate of 6.4 pounds per person per day and includes residential and commercial municipal solid waste. MSW from communities served by the facilities in Conway, Lebanon, Claremont, and Concord was not included in the total.
6. The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.
7. "*" indicates that the listed town disposed of waste at the NCES facility in the last five years.
8. The 40% waste diversion factor is based on the statutory goal established in RSA 149-M:11. Data provided by PCAS indicates the actual diversion rate is currently approximately 23%. For purposes of evaluating the quantity of waste requiring disposal, we have assumed a realistic diversion rate of 26% for the period of 2005 through 2009, escalating to 40% in 2015.

Table 3
Projected Population and Waste Generation Data in Northern New Hampshire for 2005

2005						
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity of MSW and C&D Requiring Disposal 40% Diversion (Tons/Year)	Net Quantity of MSW and C&D Requiring Disposal 26% Diversion (Tons/Year)
Albany	705			0	0	0
Alexandria *	1,371	1,601	259	1,860	1,116	1,377
Alton	4,683	5,470	885	6,355	3,813	4,703
Andover	2,209		418	418	251	309
Ashland	2,003	2,340	379	2,718	1,631	2,011
Bartlett *	2,924	3,415	553	3,968	2,381	2,936
Bath *	913	1,066	173	1,239	743	917
Beans Purchase		0	0	0	0	0
Barnett	7,024		1,328	1,328	797	982
Benton	322	376	61	437	262	323
Berlin	10,349	12,088	1,956	14,044	8,426	10,392
Bethlehem *	2,250	2,628	425	3,053	1,832	2,259
Bridgewater	998	1,166	189	1,354	813	1,002
Bristol	3,102		586	586	352	434
Brookfield	667	779	126	905	543	670
Cambridge		0	0	0	0	0
Campton *	2,794	3,263	528	3,791	2,275	2,806
Canaan	3,407			0	0	0
Carroll *	664	776	125	901	541	667
Center Harbor	1,047	1,223	198	1,421	852	1,051
Chatham	286	334	54	388	233	287
Clarksville	294	343	56	399	239	295
Colebrook *	2,325	2,716	439	3,155	1,893	2,335
Columbia	751	877	142	1,019	611	754
Conway	9,320			0	0	0
Dalton *	929	1,085	176	1,261	756	933
Danbury	1,124	1,313	212	1,525	915	1,129
Dix Grant		0	0	0	0	0
Dixville		0	0	0	0	0
Dorchester	366	427	69	497	298	368
Dummer	310	362	59	421	252	311
Easton	264	308	50	358	215	265
Easton	410			0	0	0
Effingham	1,403	1,639	265	1,904	1,142	1,409
Ellsworth	89	104	17	121	72	89
Errol	4,734			0	0	0
Errol	298	348	56	404	243	299
Franconia *	945	1,104	179	1,282	769	949
Franklin	8,811		1,665	1,665	999	1,232
Freedom *	1,413	1,650	267	1,917	1,150	1,419
Gilford	7,100		1,342	1,342	805	993
Gilmanton	3,204		606	606	363	448
Gorham	2,900	3,387	548	3,935	2,361	2,912
Greenville	1,165			0	0	0
Granville	2,229		421	421	253	312
Groton *	465	543	88	631	379	467
Hampshire	11,075			0	0	0
Harts Location	40	47	8	54	33	40
Haverhill *	4,521	5,281	854	6,135	3,681	4,540
Hebron	469	548	89	636	382	471
Hillsboro	1,035		196	196	117	145
Holderness *	1,973	2,304	373	2,677	1,606	1,981
Jackson *	900	1,051	170	1,221	733	904
Jefferson *	1,008	1,177	191	1,368	821	1,012
Kilkenny		0	0	0	0	0
Lacrosse	17,111		3,234	3,234	1,940	2,393
Lancaster	3,286	3,838	621	4,459	2,675	3,300
Landaff *	387	452	73	525	315	389

Table 3
Projected Population and Waste Generation Data in Northern New Hampshire for 2005

2005						
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity of MSW and C&D Requiring Disposal 40% Diversion (Tons/Year)	Net Quantity of MSW and C&D Requiring Disposal 26% Diversion (Tons/Year)
Belmont	12,880			0	0	0
Lincoln *	1,302	1,521	246	1,767	1,060	1,307
Lisbon *	1,630	1,904	308	2,212	1,327	1,637
Littleton *	5,987	6,993	1,132	8,124	4,875	6,012
Livermore		0	0	0	0	0
Lyman *	499	583	94	677	406	501
May	1,717			0	0	0
Madison	2,222	2,595	420	3,015	1,809	2,231
Meredith	6,157		1,164	1,164	698	861
Middleton	1,527	1,784	289	2,072	1,243	1,533
Milan	1,334	1,558	252	1,810	1,086	1,340
Millsfield		0	0	0	0	0
Monroe *	780	911	147	1,058	635	783
Moultonborough *	4,843	5,657	915	6,572	3,943	4,863
New Durham	2,368	2,766	448	3,213	1,928	2,378
New Hampton *	2,021	2,361	382	2,742	1,645	2,029
Northfield	4,823		912	912	547	675
Northumberland *	2,442	2,852	462	3,314	1,988	2,452
Odell		0	0	0	0	0
Orange	306			0	0	0
Orford *	1,117	1,305	211	1,516	909	1,122
Ossipee *	4,527	5,288	856	6,143	3,686	4,546
Piermont *	725	847	137	984	590	728
Pittsburg	859	1,015	164	1,179	708	873
Plainfield	2,321			0	0	0
Plymouth *	6,048	7,064	1,143	8,207	4,924	6,073
Randolph *	340	397	64	461	277	341
Rumney *	1,521	1,777	287	2,064	1,238	1,527
Salisbury	1,204		228	228	137	168
Sanbornton *	2,694	3,147	509	3,656	2,193	2,705
Sandwich	1,399	1,634	264	1,898	1,139	1,405
Second College		0	0	0	0	0
Shelburne *	380	444	72	516	309	382
Springfield	981	1,146	185	1,331	799	985
Stark	517	604	98	702	421	519
Stewartstown *	1,014	1,184	192	1,376	826	1,018
Stratford *	943	1,101	178	1,280	768	947
Success		0	0	0	0	0
Sugar Hill	575	672	109	780	468	577
Tamworth	2,764	3,228	522	3,751	2,250	2,776
Thornton *	1,894	2,212	358	2,570	1,542	1,902
Tilton	3,616		683	683	410	506
Tuftsboro	2,324	2,714	439	3,154	1,892	2,334
Wakefield	4,629	5,407	875	6,282	3,769	4,648
Warren	897	1,048	170	1,217	730	901
Waterville Valley *	261	305	49	354	213	262
Wentworth *	816	953	154	1,107	664	819
Wentworths Location		0	0	0	0	0
Whitefield *	2,042	2,385	386	2,771	1,663	2,051
Wilmot *	1,200	1,402	227	1,628	977	1,205
Wolfeboro	6,610	7,720	1,249	8,970	5,382	6,638
Woodstock	1,169	1,365	221	1,586	952	1,174
Totals	248,607	155,276	37,907	193,183	115,910	129,433
Total including 12% Special Waste					139,092	152,615
Mt. Carberry Capacity					32,500	32,500
Total Required Disposal Capacity					106,592	120,115
Total Required Capacity at Historic Mt. Carberry Rates					124,592	138,115

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Table 4
Projected Population and Waste Generation Data in Northern New Hampshire for 2010

2010						
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)	Net Quantity Requiring Disposal 33% Diversion (Tons/Year)
Albany	742			0	0	0
Alexandria *	1,391	1,625	263	1,888	1,133	1,265
Alton	4,791	5,596	905	6,501	3,901	4,356
Andover	2,267		428	428	257	287
Ashland	2,023	2,363	382	2,745	1,647	1,839
Bartlett *	3,084	3,602	583	4,185	2,511	2,804
Bath *	922	1,077	174	1,251	751	838
Beans Purchase		0	0	0	0	0
Bellows Falls	7,209		1,363	1,363	818	913
Benton	326	381	62	442	265	296
Berlin	10,306	12,037	1,948	13,985	8,391	9,370
Bethlehem *	2,273	2,655	430	3,084	1,851	2,067
Bridgewater	1,009	1,179	191	1,369	822	917
Bristol	3,132		592	592	355	397
Brookfield	714	834	135	969	581	649
Cambridge		0		0	0	0
Campton *	2,828	3,303	534	3,838	2,303	2,571
Canaan	3,446			0	0	0
Carroll *	662	773	125	898	539	602
Center Harbor	1,077	1,258	204	1,461	877	979
Chatham	305	356	58	414	248	277
Clarksville	293	342	55	398	239	266
Colebrook *	2,315	2,704	438	3,141	1,885	2,105
Columbia	748	874	141	1,015	609	680
Concord	9,813			0	0	0
Dalton *	925	1,080	175	1,255	753	841
Danbury	1,155	1,349	218	1,567	940	1,050
Dix Grant		0	0	0	0	0
Dixville		0	0	0	0	0
Dorchester	372	434	70	505	303	338
Dummer	309	361	58	419	252	281
Easton	268	313	51	364	218	244
Ellington	435			0	0	0
Effingham	1,503	1,756	284	2,040	1,224	1,367
Ellsworth	90	105	17	122	73	82
Emery	4,785			0	0	0
Errol	297	347	56	403	242	270
Franconia *	954	1,114	180	1,295	777	867
Franklin	9,036		1,708	1,708	1,025	1,144
Freedom *	1,494	1,745	282	2,027	1,216	1,358
Gifford	7,272		1,374	1,374	825	921
Gilmanton	3,289		622	622	373	416
Gorham	2,887	3,372	546	3,918	2,351	2,625
Grant	1,177			0	0	0
Granville	2,284		432	432	259	289
Groton *	469	548	89	636	382	426
Hanover	11,168			0	0	0
Harts Location	43	50	8	58	35	39
Haverhill *	4,567	5,334	863	6,197	3,718	4,152
Hebron	473	552	89	642	385	430
Hills	1,060		200	200	120	134
Holderness *	1,992	2,327	376	2,703	1,622	1,811
Jackson *	947	1,106	179	1,285	771	861
Jefferson *	1,003	1,172	190	1,361	817	912
Kilkenny		0	0	0	0	0
Laconia	17,500		3,308	3,308	1,985	2,216
Lancaster	3,270	3,819	618	4,437	2,662	2,973
Landaff *	391	457	74	531	318	355

Table 4
Projected Population and Waste Generation Data in Northern New Hampshire for 2010

2010						
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)	Net Quantity Requiring Disposal 33% Diversion (Tons/Year)
Bellamy	13,012			0	0	0
Lincoln *	1,315	1,536	249	1,784	1,071	1,196
Lisbon *	1,648	1,925	311	2,236	1,342	1,498
Littleton *	6,046	7,062	1,143	8,204	4,923	5,497
Livermore		0	0	0	0	0
Lyman *	504	589	95	684	410	458
Lyons	1,734			0	0	0
Madison	2,407	2,811	455	3,266	1,960	2,188
Meredith	6,282		1,187	1,187	712	795
Middleton	1,572	1,836	297	2,133	1,280	1,429
Milan	1,327	1,550	251	1,801	1,080	1,206
Millsfield		0	0	0	0	0
Monroe *	789	922	149	1,071	642	717
Moultonborough *	5,110	5,968	966	6,934	4,161	4,646
New Durham	2,446	2,857	462	3,319	1,992	2,224
New Hampton *	2,063	2,410	390	2,799	1,680	1,876
Northfield	4,985		942	942	565	631
Northumberland *	2,432	2,841	460	3,300	1,980	2,211
Odell		0	0	0	0	0
Orange	309			0	0	0
Orford *	1,128	1,318	213	1,531	918	1,026
Ossipee *	4,758	5,557	899	6,457	3,874	4,326
Piermont *	732	855	138	993	596	666
Pittsburg	865	1,010	163	1,174	704	786
Plamondon	2,388			0	0	0
Plymouth *	6,115	7,142	1,156	8,298	4,979	5,560
Randolph *	338	395	64	459	275	307
Runney *	1,539	1,798	291	2,088	1,253	1,399
Safford	1,243		235	235	141	157
Sanbornton *	2,760	3,224	522	3,745	2,247	2,509
Sandwich	1,479	1,727	280	2,007	1,204	1,345
Second College		0	0	0	0	0
Shelburne *	377	440	71	512	307	343
Springfield	1,012	1,182	191	1,373	824	920
Stark	515	602	97	699	419	468
Stewartstown *	1,010	1,180	191	1,371	822	918
Stratford *	939	1,097	177	1,274	765	854
Success		0	0	0	0	0
Sugar Hill	580	677	110	787	472	527
Tamworth	2,951	3,447	558	4,005	2,403	2,683
Thornton *	1,918	2,240	363	2,603	1,562	1,744
Tilton	3,694		698	698	419	468
Tuftsboro	2,453	2,865	464	3,329	1,997	2,230
Wakefield	4,911	5,736	928	6,664	3,999	4,465
Warren	907	1,059	171	1,231	738	825
Waterville Valley *	263	307	50	357	214	239
Wentworth *	824	962	156	1,118	671	749
Wentworths Location		0	0	0	0	0
Whitefield *	2,033	2,375	384	2,759	1,655	1,848
Wilmot *	1,232	1,439	233	1,672	1,003	1,120
Wolfeboro	6,990	8,164	1,321	9,485	5,691	6,355
Woodstock	1,182	1,381	223	1,604	962	1,075
Totals	254,208	158,785	38,783	197,568	236,350	118,541
Total including 12% Special Waste					260,058	142,249
Mt. Carberry Capacity					32,500	32,500
Total Required Disposal Capacity					227,558	109,749
Total Required Capacity at Historic Mt. Carberry Rates					245,558	127,749

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Table 5
Projected Population and Waste Generation Data in Northern New Hampshire for 2015

2015					
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)
Albany *	794			0	0
Alexandria *	1,426	1,666	270	1,935	1,161
Alton	5,025	5,869	950	6,819	4,091
Amboys *	2,368		448	448	269
Ashland	2,056	2,401	389	2,790	1,674
Bartlett *	3,309	3,865	625	4,490	2,694
Bath *	937	1,094	177	1,272	763
Beans Purchase		0	0	0	0
Benton	7,609		1,438	1,438	863
Benton	332	388	63	451	270
Berlin	10,316	12,049	1,950	13,999	8,399
Bethlehem *	2,312	2,700	437	3,137	1,882
Bridgewater	1,028	1,201	194	1,395	837
Bristol	3,183		602	602	361
Brookfield	783	915	148	1,063	638
Cambridge		0		0	0
Campton *	2,888	3,373	546	3,919	2,351
Canaan *	3,513			0	0
Carroll *	663	774	125	900	540
Center Harbor	1,141	1,333	216	1,548	929
Chatham	331	387	63	449	270
Clarksville	293	342	55	398	239
Colebrook *	2,317	2,706	438	3,144	1,887
Columbia	749	875	142	1,016	610
Concord *	10,479			0	0
Dalton *	926	1,082	175	1,257	754
Danbury	1,210	1,413	229	1,642	985
Dix Grant		0	0	0	0
Dixville		0	0	0	0
Dorchester	383	447	72	520	312
Dummer	309	361	58	419	252
Easton	275	321	52	373	224
Ellsworth	470			0	0
Effingham	1,655	1,933	313	2,246	1,348
Ellsworth	92	107	17	125	75
Errol	4,874			0	0
Errol	297	347	56	403	242
Franconia *	969	1,132	183	1,315	789
Franklin	9,416		1,780	1,780	1,068
Freedom *	1,613	1,884	305	2,189	1,313
Gilford *	7,640		1,444	1,444	866
Gilmanston *	3,474		657	657	394
Gorham	2,890	3,376	546	3,922	2,353
Grafton *	1,198			0	0
Granby *	2,362		446	446	268
Groton *	476	556	90	646	388
Hannover	11,325			0	0
Harts Location	46	54	9	62	37
Haverhill *	4,647	5,428	878	6,306	3,784
Hebron	480	561	91	651	391
Hill * *	1,104		209	209	125
Holderness *	2,024	2,364	383	2,747	1,648
Jackson *	1,013	1,183	191	1,375	825
Jefferson *	1,004	1,173	190	1,362	817
Kilkenny		0	0	0	0
Lacoma *	18,286		3,456	3,456	2,074
Lancaster	3,274	3,824	619	4,443	2,666
Landaff *	398	465	75	540	324

Table 5
Projected Population and Waste Generation Data in Northern New Hampshire for 2015

2015					
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)
Belmont	13,235			0	0
Lincoln *	1,337	1,562	253	1,814	1,089
Lisbon *	1,679	1,961	317	2,278	1,367
Littleton *	6,144	7,176	1,161	8,337	5,002
Livermore		0	0	0	0
Lyman *	514	600	97	697	418
Madison	1,763			0	0
Madison	2,689	3,141	508	3,649	2,189
Madison	6,542		1,236	1,236	742
Middleton	1,662	1,941	314	2,255	1,353
Milan	1,329	1,552	251	1,803	1,082
Millsfield		0	0	0	0
Monroe *	805	940	152	1,092	655
Moultonborough *	5,506	6,431	1,041	7,472	4,483
New Durham	2,600	3,037	491	3,528	2,117
New Hampton *	2,149	2,510	406	2,916	1,750
Northfield *	5,279		998	998	599
Northumberland *	2,434	2,843	460	3,303	1,982
Odell		0	0	0	0
Orford *	314			0	0
Orford *	1,146	1,339	217	1,555	933
Ossipee *	5,083	5,937	961	6,898	4,139
Piermont *	744	869	141	1,010	606
Pittsburg	866	1,011	164	1,175	705
Pittsburg	2,479			0	0
Plymouth *	6,229	7,275	1,177	8,453	5,072
Randolph *	339	396	64	460	276
Rumney *	1,569	1,833	297	2,129	1,277
Salisbury *	1,314		248	248	149
Sanbornton *	2,903	3,391	549	3,939	2,364
Sandwich	1,594	1,862	301	2,163	1,298
Second College		0	0	0	0
Shelburne *	378	442	71	513	308
Springfield	1,056	1,233	200	1,433	860
Stark	516	603	98	700	420
Stewartstown *	1,011	1,181	191	1,372	823
Stratford *	940	1,098	178	1,276	765
Success		0	0	0	0
Sugar Hill	589	688	111	799	480
Tamworth	3,226	3,768	610	4,378	2,627
Thornton *	1,960	2,289	370	2,660	1,596
Tilton *	3,854		728	728	437
Tuftsboro	2,634	3,077	498	3,574	2,145
Wakefield	5,331	6,227	1,008	7,234	4,341
Warren	925	1,080	175	1,255	753
Waterville Valley *	266	311	50	361	217
Wentworth *	837	978	158	1,136	681
Wentworths Location		0	0	0	0
Whitefield *	2,035	2,377	385	2,761	1,657
Wilmot *	1,290	1,507	244	1,751	1,050
Wolfeboro	7,539	8,806	1,425	10,230	6,138
Woodstock	1,204	1,406	228	1,634	980
Totals	263,820	164,624	40,328	204,952	122,971
Total including 12% Special Waste					147,565
Mt. Carberry Capacity					32,500
Total Required Disposal Capacity					115,065
Total Required Capacity at Historic Mt. Carberry Rates					133,065

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Table 6
Projected Population and Waste Generation in Northern New Hampshire for 2020

2020					
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)
Albany	853			0	0
Alexandria *	1,485	1,734	281	2,015	1,209
Alton	5,218	6,095	986	7,081	4,248
Andover	2,479		469	469	281
Ashland	2,111	2,466	399	2,865	1,719
Bartlett *	3,560	4,158	673	4,831	2,899
Bath *	962	1,124	182	1,305	783
Beans Purchase		0	0	0	0
Bellows Falls	7,975		1,507	1,507	904
Benton	343	401	65	465	279
Berlin	10,204	11,918	1,929	13,847	8,308
Bethlehem *	2,377	2,776	449	3,226	1,935
Bridgewater	1,059	1,237	200	1,437	862
Bristol	3,267		617	617	370
Brookfield	863	1,008	163	1,171	703
Cambridge		0		0	0
Campton *	2,988	3,490	565	4,055	2,433
Canaan	3,625			0	0
Carroll *	657	767	124	892	535
Center Harbor	1,194	1,395	226	1,620	972
Chatham	361	422	68	490	294
Clarksville	291	340	55	395	237
Colebrook *	2,289	2,674	433	3,106	1,864
Columbia	742	867	140	1,007	604
Conway	11,187			0	0
Dalton *	914	1,068	173	1,240	744
Danbury	1,271	1,485	240	1,725	1,035
Dix Grant		0	0	0	0
Dixville		0	0	0	0
Dorchester	401	468	76	544	326
Dummer	306	357	58	415	249
Easton	287	335	54	389	234
Easton	510			0	0
Effingham	1,831	2,139	346	2,485	1,491
Ellsworth	95	111	18	129	77
Enfield	5,022			0	0
Errol	294	343	56	399	239
Franconia *	994	1,161	188	1,349	809
Franklin	9,820		1,856	1,856	1,114
Freedom *	1,751	2,045	331	2,376	1,426
Gilford	7,943		1,501	1,501	901
Gilmanton	3,627		686	686	411
Gorham	2,856	3,336	540	3,876	2,325
Grafton	1,233			0	0
Grafton	2,424		458	458	275
Groton *	487	569	92	661	397
Hampstead	11,579			0	0
Harris Location	50	58	9	68	41
Haverhill *	4,780	5,583	903	6,486	3,892
Hebron	492	575	93	668	401
Hillsboro	1,152		218	218	131
Holderness *	2,078	2,427	393	2,820	1,692
Jackson *	1,087	1,270	205	1,475	885
Jefferson *	990	1,156	187	1,343	806
Kilkenny		0	0	0	0
Lancaster	18,919		3,576	3,576	2,145
Lancaster	3,232	3,775	611	4,386	2,631
Landaff *	409	478	52	530	318
Lebanon	13,606			0	0

Table 6
Projected Population and Waste Generation in Northern New Hampshire for 2020

2020					
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)
Lincoln *	1,373	1,604	259	1,863	1,118
Lisbon *	1,730	2,021	327	2,348	1,409
Littleton *	6,307	7,367	1,192	8,559	5,135
Livermore		0	0	0	0
Lyman *	530	619	100	719	432
Lyme	1,811			0	0
Madison	3,015	3,522	570	4,091	2,455
Marietta	6,755		1,277	1,277	766
Middleton	1,762	2,058	333	2,391	1,435
Milan	1,309	1,529	247	1,776	1,066
Millsfield		0	0	0	0
Monroe *	832	972	157	1,129	677
Moultonborough *	5,964	6,966	1,127	8,093	4,856
New Durham	2,772	3,238	524	3,762	2,257
New Hampton *	2,220	2,593	420	3,013	1,808
Northfield	5,605		1,059	1,059	636
Northumberland *	2,406	2,810	455	3,265	1,959
Odell		0	0	0	0
Orange	323			0	0
Orford *	1,176	1,374	223	1,596	958
Ossipee *	5,446	6,361	1,031	7,392	4,435
Piermont *	764	892	145	1,037	622
Pittsburg	854	997	162	1,159	695
Plainfield	2,551			0	0
Plymouth *	6,419	7,497	1,213	8,711	5,226
Randolph *	333	389	63	452	271
Rumney *	1,620	1,892	306	2,198	1,319
Salem	1,392		263	263	158
Sanbornton *	3,021	3,529	571	4,099	2,460
Sandwich	1,727	2,017	326	2,344	1,406
Second College		0	0	0	0
Shelburne *	371	433	70	503	302
Springfield	1,091	1,274	206	1,480	888
Stark	509	595	96	691	414
Stewartstown *	1,000	1,168	189	1,357	814
Stratford *	931	1,087	176	1,263	758
Success		0	0	0	0
Sugar Hill	604	705	114	820	492
Tamworth	3,544	4,139	670	4,809	2,886
Thornton *	2,031	2,372	384	2,756	1,654
Tilton	3,982		753	753	452
Tuftsboro	2,836	3,312	536	3,848	2,309
Wakefield	5,816	6,793	1,099	7,892	4,735
Warren	955	1,115	180	1,296	778
Waterville Valley *	271	317	51	368	221
Wentworth *	859	1,003	162	1,166	699
Wentworths Location		0	0	0	0
Whitefield *	2,009	2,347	380	2,726	1,636
Wilmot *	1,354	1,581	256	1,837	1,102
Wolfeboro	8,174	9,547	1,545	11,092	6,655
Woodstock	1,241	1,449	235	1,684	1,010
Totals	274,125	171,094	41,902	212,997	127,798
Total including 12% Special Waste					153,358
Mt. Carberry Capacity					32,500
Total Required Disposal Capacity					120,858
Total Required Capacity at Historic Mt. Carberry Rates					138,858

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Table 7
Projected Population and Waste Generation in Northern New Hampshire in 2024

2024					
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)
Albany	900			0	0
Alexandria *	1,532	1,790	290	2,079	1,248
Alton	5,372	6,275	1,015	7,290	4,374
Andover	2,568		485	485	291
Ashland	2,155	2,517	407	2,924	1,755
Bartlett *	3,761	4,393	711	5,103	3,062
Bath *	982	1,147	186	1,333	800
Beans Purchase		0	0	0	0
Berkeley	8,268		1,563	1,563	938
Benton	352	411	66	477	286
Berlin	10,114	11,814	1,912	13,725	8,235
Bethlehem *	2,429	2,837	459	3,296	1,978
Bridgewater	1,084	1,266	205	1,471	882
Bristol	3,334		630	630	378
Brookfield	927	1,083	175	1,258	755
Cambridge		0		0	0
Canton *	3,068	3,583	580	4,163	2,498
Canaan	3,715			0	0
Carroll *	652	762	123	885	531
Center Harbor	1,236	1,444	234	1,678	1,007
Chatham	385	450	73	522	313
Clarksville	289	338	55	393	236
Colebrook *	2,267	2,647	428	3,076	1,845
Columbia	736	860	139	999	600
Conway	11,753			0	0
Dalton *	904	1,056	171	1,227	736
Danbury	1,320	1,542	249	1,791	1,075
Dix Grant		0	0	0	0
Dixville		0	0	0	0
Dorchester	415	485	79	564	338
Dummer	304	355	57	412	247
Easton	297	346	56	402	241
Edinboro	542			0	0
Effingham	1,972	2,303	373	2,676	1,605
Ellsworth	97	114	18	132	79
Enfield	5,140			0	0
Errol	292	341	55	396	237
Franconia *	1,014	1,184	192	1,376	826
Franklin	10,143		1,917	1,917	1,150
Freedom *	1,861	2,174	352	2,526	1,516
Gilford	8,185		1,547	1,547	928
Gilmanton	3,749		709	709	425
Gorham	2,829	3,304	535	3,839	2,303
Grafton	1,261			0	0
Graham	2,474		468	468	281
Groton *	496	579	94	673	404
Hampstead	11,782			0	0
Harts Location	53	62	10	72	43
Haverhill *	4,886	5,707	924	6,631	3,979
Hebron	502	586	95	681	408
Hill	1,190		225	225	135
Holderness *	2,121	2,478	401	2,878	1,727
Jackson *	1,146	1,339	217	1,555	933
Jefferson *	979	1,143	185	1,328	797
Kilkenny		0	0	0	0
Lacoda	19,425		3,671	3,671	2,203
Lancaster	3,198	3,736	604	4,340	2,604
Landaff *	418	488	79	567	340
Lebanon	13,903			0	0

Table 7
Projected Population and Waste Generation in Northern New Hampshire in 2024

2024					
Town	Projected Population	Projected Waste Generation (Tons/Year)	Projected C&D Generation (Tons/Year)	Quantity Prior to Waste Reduction (Tons/Year)	Net Quantity Requiring Disposal 40% Diversion (Tons/Year)
Lincoln *	1,402	1,637	265	1,902	1,141
Lisbon *	1,771	2,068	335	2,403	1,442
Littleton *	6,437	7,519	1,217	8,736	5,241
Livermore	0	0	0	0	0
Lyman *	543	634	103	737	442
Lyons	1,849			0	0
Madison	3,276	3,826	619	4,445	2,667
Meredith	6,925		1,309	1,309	785
Middleton	1,842	2,151	348	2,500	1,500
Milan	1,293	1,510	244	1,755	1,053
Millsfield	0	0	0	0	0
Monroe *	854	997	161	1,158	695
Moultonborough *	6,330	7,394	1,196	8,590	5,154
New Durham	2,910	3,398	550	3,948	2,369
New Hampton *	2,277	2,659	430	3,090	1,854
Northfield	5,866		1,109	1,109	665
Northumberland *	2,384	2,784	451	3,235	1,941
Odell		0	0	0	0
Orange	330			0	0
Orford *	1,200	1,402	227	1,628	977
Ossipee *	5,736	6,700	1,084	7,784	4,671
Piermont *	780	911	147	1,058	635
Pittsburg	844	986	160	1,146	688
Plainfield	2,609			0	0
Plymouth *	6,571	7,675	1,242	8,917	5,350
Randolph *	328	383	62	445	267
Rumney *	1,661	1,940	314	2,254	1,352
Salisbury	1,454		275	275	165
Sanbornton *	3,115	3,639	589	4,228	2,537
Sandwich	1,833	2,141	347	2,488	1,493
Second College	0	0	0	0	0
Shelburne *	365	427	69	496	298
Springfield	1,119	1,307	211	1,518	911
Stark	503	588	95	683	410
Stewartstown *	991	1,158	187	1,345	807
Stratford *	924	1,079	175	1,254	752
Success		0	0	0	0
Sugar Hill	616	719	116	836	502
Tamworth	3,798	4,437	718	5,154	3,093
Thornton *	2,088	2,439	395	2,833	1,700
Tilton	4,084		772	772	463
Tuftsboro	2,998	3,501	567	4,068	2,441
Wakefield	6,204	7,246	1,173	8,419	5,051
Warren	979	1,143	185	1,329	797
Waterville Valley *	275	321	52	373	224
Wentworth *	877	1,024	166	1,190	714
Wentworths Location		0	0	0	0
Whitefield *	1,988	2,322	376	2,698	1,619
Wilmot *	1,405	1,641	266	1,907	1,144
Wolfeboro	8,682	10,141	1,641	11,781	7,069
Woodstock	1,271	1,484	240	1,724	1,035
Totals	282,369	176,271	43,202	219,473	131,684
Total including 12% Special Waste					158,021
Mt. Carberry Capacity					32,500
Total Required Disposal Capacity					125,521
Total Required Capacity at Historic Mt. Carberry Rates					143,521

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Table 8
Allenstown Transfer Station Service Area for 2005

TOWN	POPULATION	MSW	C&D
Allenstown	5,088		962
Alton	4,683	5,470	885
Amherst	11,764	13,740	2,223
Barnstead	4,058	4,740	767
Belmont	7,024		1,328
Boscawen	3,857		729
Bow	7,455		1,409
Brentwood	3,483	4,068	658
Brookfield	667	779	126
Candia	4,279	4,998	809
Canterbury	2,068		391
Chester	4,099	4,788	775
Chichester	2,354	2,749	445
Concord	42,687		8,068
Danville	4,462	5,212	843
Deerfield	4,155	4,853	785
Deering	2,060	2,406	389
Derry	36,783	42,963	6,952
Dunbarton	2,346		443
Epping	6,238	7,286	1,179
Epsom	4,241	4,953	802
Farmington	6,122	7,150	1,157
Francestown	1,619	1,891	306
Franklin	8,811		1,665
Freedom	1,413	1,650	267
Fremont	3,796	4,434	717
Gilmanton	3,204		606
Hampstead	9,415	10,997	1,779
Henniker	4,682		885
Hillsborough	5,326		1,007
Hooksett	12,272	14,334	2,319
Hopkinton	5,679		1,073
Kingston	6,624	7,737	1,252
East Kingston	1,927	2,251	364
Laconia	17,111		3,234
Lee	4,436	5,181	838
Litchfield	8,604	10,049	1,626
Londonderry	25,691	30,007	4,856
Loudon	4,780		903
Lyndeborough	1,784	2,084	337
Manchester	110,904	129,536	20,961
Merrimack	27,182	31,749	5,137
Milton	4,172	4,873	789
Mont Vernon	2,245	2,622	424
New Boston	4,511	5,269	853
New Durham	2,368	2,766	448
Newfields	1,644	1,920	311
Northfield	4,823		912
Northwood	4,085	4,771	772
Nottingham	4,143	4,839	783
Ossipee	4,527	5,288	856
Pittsfield	4,125	4,818	780
Raymond	10,697	12,494	2,022
Salem	30,811	35,987	5,823
Salisbury	1,204		228
Sanbornton	2,694	3,147	509
Sandown	5,854	6,837	1,106
Strafford	3,858	4,506	729
Tilton	3,616	4,223	683
Wakefield	4,629	5,407	875
Warner	2,879		544
Weare	9,186		1,736
Webster	1,664		314
Wolfeboro	6,610	7,720	1,249
TOTAL	555,578	485,542	105,004

NOTES

1. Projected population data was obtained from "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October 1997. Population Projections were updated using the 2000 Census population and calculating the new projected populations from 2005 to 2025 using the following calculation:

$$[(X+5)-X]+Y = \text{Updated Projected Population.}$$

where:

X is the 1997 Projected Population for the year desired for updating.

X + 5 is the 1997 Projected Population five years beyond the desired year for updating.

Y is the previous Updated Projected Population figure. (For the 2005 case, Y is the 2000 Census Population Figure).

2. 2000 Census Population data was obtained from the U.S. 2000 Census State Data Center for the State of New Hampshire at the website:
<http://www.state.nh.us/osp/planning/sdc.html>.

3. Projected generation of municipal solid waste (MSW) is based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation of 6.4 pounds per person per day and includes residential and commercial municipal solid waste.

4. The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.

5. Towns with long-term MSW contracts through the Concord Cooperative are not included in MSW totals but are included in the C&D totals.

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Table 9
Allenstown Transfer Station Service Area for 2024

TOWN	POPULATION	MSW	C&D
Allenstown	5,970		764
Alton	5,372	6,275	688
Amherst	16,138	18,849	2,066
Barnstead	4,744	5,541	607
Belmont	8,268		1,058
Boscawen	4,481		574
Bow	8,658		1,108
Brentwood	4,624	5,401	592
Brookfield	927	1,083	119
Candia	5,441	6,355	696
Canterbury	2,391		306
Chester	5,522	6,450	707
Chichester	2,792	3,261	357
Concord	49,725		6,365
Danville	6,579	7,684	842
Deerfield	6,104	7,129	781
Deering	3,017		386
Dunbarton	2,815		360
Epping	9,682	11,309	1,239
Epsom	5,055	5,904	647
Farmington	7,268	8,489	930
Francestown	2,338	2,731	299
Franklin	10,143		1,298
Freedom	1,861	2,174	238
Fremont	4,937	5,767	632
Gilmanton	3,749		480
Hampstead	14,724	17,198	1,885
Henniker	5,596		716
Hillsborough	7,182		919
Hopkinton	6,690	7,814	856
Kingston	9,956	11,628	1,274
East Kingston	2,490		319
Laconia	19,425	22,689	2,486
Lee	5,511	6,437	705
Litchfield	12,362	14,439	1,582
Londonderry	37,161		4,757
Loudon	5,975	6,979	765
Lyndeborough	2,654	3,100	340
Manchester	119,065	139,067	15,240
Merrimack	35,062	40,953	4,488
Milton	5,105	5,963	653
Mont Vernon	3,113	3,636	398
New Boston	6,262	7,314	802
New Durham	2,910	3,399	372
Newfields	1,989		255
Northfield	5,866	6,851	751
Northwood	6,067	7,086	777
Nottingham	6,151	7,184	787
Ossipee	5,736	6,700	734
Pittsfield	4,818	5,627	617
Raymond	15,356	17,935	1,966
Salem	40,869		5,231
Salisbury	1,454	1,699	186
Sanbornton	3,115	3,639	399
Sandown	9,294	10,856	1,190
Strafford	4,716	5,508	604
Tilton	4,084		523
Wakefield	6,204	7,246	794
Warner	3,306		423
Weare	13,113		1,678
Webster	1,976		253
Wolfeboro	8,682	10,141	1,111
TOTAL	632,641	485,489	80,978

NOTES

- Projected population data was obtained from "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October 1997. Population Projections were updated using the 2000 Census population and calculating the new projected populations from 2005 to 2025 using the following calculation:

$$[(X+5)-X]+Y = \text{Updated Projected Population.}$$
 where:
 X is the 1997 Projected Population for the year desired for updating.
 X + 5 is the 1997 Projected Population five years beyond the desired year for updating.
 Y is the previous Updated Projected Population figure. (For the 2005 case, Y is the 2000 Census Population Figure.)
- 2000 Census Population data was obtained from the U.S. 2000 Census State Data Center for the State of New Hampshire at the website: <http://www.state.nh.us/osp/planning/sdc.html>.
- Projected generation of municipal solid waste (MSW) is based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation of 6.4 pounds per person per day and includes residential and commercial municipal solid waste.
- The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.
- Towns with long-term MSW contracts through the Concord Cooperative are not included in MSW totals but are included in the C&D totals.

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Table 10
GDS Transfer Station Service Area for 2005

TOWN	POPULATION	MSW	C&D
Acworth	869		164
Alstead	2,017	2,356	381
Andover	2,209	2,580	418
Bradford	1,537	1,795	290
Canaan	3,407		644
Charlestown	4,907	5,731	927
Claremont	13,580		2,567
Cornish	1,718		325
Croydon	682		129
Danbury	1,124	1,313	212
Enfield	4,734		895
Gilsum	806	941	152
Goshen	773		146
Grafton	1,165	1,361	220
Grantham	2,229		421
Hanover	11,075		2,093
Langdon	611		115
Lebanon	12,880		2,434
Lempster	1,014		192
Marlow	775	905	146
New London	4,284		810
Newbury	1,789	2,090	338
Newport	6,468		1,222
Plainfield	2,321		439
Springfield	981		185
Stoddard	956	1,117	181
Sunapee	3,150		595
Sutton	1,634	1,909	309
Unity	1,584	1,850	299
Walpole	3,709	4,332	701
Washington	924	1,079	175
Wilmot	1,200	1,402	227
Windsor	210	245	40
TOTAL	97,322	31,006	18,394

NOTES:

1. Projected population data was obtained from "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October 1997. Population Projections were updated using the 2000 Census population and calculating the new projected populations from 2005 to 2025 using the following calculation:

$$[(X+5)-X]+Y = \text{Updated Projected Population.}$$

where:

X is the 1997 Projected Population for the year desired for updating.

X + 5 is the 1997 Projected Population five years beyond the desired year for updating.

Y is the previous Updated Projected Population figure. (For the 2005 case, Y is the 2000 Census Population Figure.)

2. 2000 Census Population data was obtained from the U.S. 2000 Census State Data Center for the State of New Hampshire at the website: <http://www.state.nh.us/osp/planning/sdc.html>.

3. Projected generation of municipal solid waste (MSW) is based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation of 6.4 pounds per person per day and includes residential and commercial municipal solid waste.

4. The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.

5. Towns with a long-term MSW contract through the NH/VT Solid Waste Project and the Lebanon Landfill are not included in the MSW totals but are included in the C&D totals.

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Table 11
GDS Transfer Station Service Area for 2024

TOWN	POPULATION	MSW	C&D
Acworth	992	1,158	187
Alstead	2,221	2,594	420
Andover	2,568	2,999	485
Bradford	1,839	2,148	348
Canaan	3,715		702
Charlestown	5,452		1,030
Claremont	14,964	17,478	2,828
Cornish	1,913	2,235	362
Croydon	754	881	143
Danbury	1,320	1,542	249
Enfield	5,140		972
Gilsum	888	1,037	168
Goshen	892	1,042	169
Grafton	1,261	1,473	238
Grantham	2,474	2,889	468
Hanover	11,782		2,227
Langdon	702	820	133
Lebanon	13,903		2,628
Lempster	1,181	1,379	223
Marlow	854	997	161
New London	4,888	5,709	924
Newbury	2,120	2,476	401
Newport	7,114	8,309	1,345
Plainfield	2,609	3,047	493
Springfield	1,119	1,307	211
Stoddard	1,039	1,214	196
Sunapee	3,480	4,064	658
Sutton	1,970	2,301	372
Unity	1,780	2,079	336
Walpole	3,999	4,671	756
Washington	1,036	1,211	196
Wilmot	1,405	1,641	266
Windsor	252	295	48
TOTAL	107,625	78,996	20,341

NOTES:

1. Projected population data was obtained from "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October 1997. Population Projections were updated using the 2000 Census population and calculating the new projected populations from 2005 to 2025 using the following calculation:

$$[(X+5)-X]+Y = \text{Updated Projected Population.}$$

where:

X is the 1997 Projected Population for the year desired for updating.

X + 5 is the 1997 Projected Population five years beyond the desired year for updating.

Y is the previous Updated Projected Population figure. (For the 2005 case, Y is the 2000 Census Population Figure.)

2. 2000 Census Population data was obtained from the U.S. 2000 Census State Data Center for the State of New Hampshire at the website: <http://www.state.nh.us/osp/planning/sdc.html>.

3. Projected generation of municipal solid waste (MSW) is based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation of 6.4 pounds per person per day and includes residential and commercial municipal solid waste.

4. The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.

5. MSW from towns in the NH/VT Solid Waste Project is included in this projection because the Project's waste contract expires in 2007.

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TABLE 12
Towns with Tractor Trailer Transfer Stations
2005

TOWN	POPULATION	MSW	C&D
Bedford	19,435	22,700	3,673
Derry	36,783	42,963	6,952
Goffstown	18,090	21,129	3,419
Hooksett	12,272	14,334	2,319
Milford	14,595	17,047	2,758
Windham	11,732	13,703	2,217
TOTAL	112,907	131,875	21,339

NOTES:

1. Projected population data was obtained from "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October 1997. Population Projections were updated using the 2000 Census population and calculating the new projected populations from 2005 to 2025 using the following calculation:

$$[(X+5)-X]+Y = \text{Updated Projected Population}$$

where:

X is the 1997 Projected Population for the year desired for updating.

X + 5 is the 1997 Projected Population five years beyond the desired year for updating.

Y is the previous Updated Projected Population figure. (For the 2005 case, Y is the 2000 Census Population Figure.)

2. 2000 Census Population data was obtained from the U.S. 2000 Census State Data Center for the State of New Hampshire at the website: <http://www.state.nh.us/osp/planning/sdc.html>.

3. Projected generation of municipal solid waste (MSW) is based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation of 6.4 pounds per person per day and includes residential and commercial municipal solid waste.

4. The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.

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TABLE 13
Towns with Tractor Trailer Transfer Stations
2024

TOWN	POPULATION	MSW	C&D
Bedford	25,375	29,638	4,796
Derry	46,867	54,741	8,858
Goffstown	22,917	26,767	4,331
Hooksett	14,593	17,044	2,758
Milford	17,895	20,902	3,382
Windham	15,827	18,486	2,991
TOTAL	143,474	167,577	27,117

NOTES:

1. Projected population data was obtained from "Municipal Population Projection 2000 to 2020" prepared by the NH Office of State Planning (OSP) in October 1997. Population Projections were updated using the 2000 Census population and calculating the new projected populations from 2005 to 2025 using the following calculation:

$$[(X+5)-X]+Y = \text{Updated Projected Population}$$

where:

X is the 1997 Projected Population for the year desired for updating.

X + 5 is the 1997 Projected Population five years beyond the desired year for updating.

Y is the previous Updated Projected Population figure. (For the 2005 case, Y is the 2000 Census Population Figure.)

2. 2000 Census Population data was obtained from the U.S. 2000 Census State Data Center for the State of New Hampshire at the website: <http://www.state.nh.us/osp/planning/sdc.html>.

3. Projected generation of municipal solid waste (MSW) is based on data provided by the Planning and Community Assistance Section (PCAS) of the Waste Management Division which indicates a per capita waste generation of 6.4 pounds per person per day and includes residential and commercial municipal solid waste.

4. The projected quantities of construction and demolition debris (C&D) were estimated by applying the 2000 C&D per capita generation of 0.189 tons per person per year based on data provided by PCAS.

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